

AN
E S S A Y

CONCERNING

Human Understanding ;

WITH

Thoughts on the Conduct of the Understanding.

BY JOHN LOCKE, ESQ.


COLLATED WITH DESMAIZEAUX'S EDITION.

To which is prefixed,

THE LIFE OF THE AUTHOR.

IN THREE VOLUMES.

VOL. I

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TO THE RIGHT HONOURABLE

T H O M A S,

EARL OF PEMBROKE AND MONTGOMERY,

Baron HERBERT of Cardiff, Lord Ross of Kendal, Par,
Fitzhugh, Marmion, St. Quintin, and Shurland;
Lord President of His Majesty's most honourable
Privy Council, and Lord Lieutenant of the County
of Wilts and of South Wales.

MY LORD,

THIS treatise, which is grown up under your Lordship's eye, and has ventured into the world by your order, does now, by a natural kind of right, come to your Lordship for that protection, which you several years since promised it. It is not that I think any name, how great soever, set at the beginning of a book, will be able to cover the faults that are to be found in it. Things in print must stand and fall by their own worth, or the reader's fancy. But there being nothing more to be desired for truth, than a fair unprejudiced hearing, nobody is more likely to procure me that, than your Lordship; who are allowed to have got so intimate an acquaintance with her, in her more retired recesses. Your Lordship is known to have so far advanced your speculations in the most abstract and general knowledge of things, beyond the ordinary reach, or common methods, that your allowance and approbation of the design of this treatise, will at least preserve it from being condemned without reading; and will prevail to have those parts a little weighed, which might otherwise, perhaps, be thought to deserve no consideration, for being somewhat out of the common road. The imputation of novelty

is a terrible charge amongst those who judge of men's heads, as they do of their perukes, by the fashion; and can allow none to be right, but the received doctrines. Truth scarce ever yet carried it by vote anywhere at its first appearance: New opinions are always suspected, and usually opposed, without any other reason, but because they are not already common. But truth, like gold, is not the less so, for being newly brought out of the mine. It is trial and examination must give it price, and not any antique fashion: And though it be not yet current by the public stamp; yet it may, for all that, be as old as nature, and is certainly not the less genuine. Your Lordship can give great and convincing instances of this, whenever you please to oblige the public with some of those large and comprehensive discoveries you have made of truths, hitherto unknown, unless to some few, to whom your Lordship has been pleased not wholly to conceal them. This alone were a sufficient reason, were there no other, why I should dedicate this Essay to your Lordship: and its having some little correspondence with some parts of that nobler and vast system of the sciences your Lordship has made so new, exact, and instructive a draught of; I think it glory enough, if your Lordship permit me to boast, that here and there I have fallen into some thoughts not wholly different from yours. If your Lordship think fit, that, by your encouragement, this should appear in the world, I hope it may be a reason, some time or other, to lead your Lordship farther: and you will allow me to say, that you here give the world an earnest of something, that, if they can bear with this, will be truly worth their expectation. This, my Lord, shows what a present I here make to your Lordship; just such as the poor man does to his rich and great neighbour, by whom the basket of flowers, or fruit, is not ill taken, though he has more plenty of his own growth, and in much greater perfection. Worthless things receive a value, when they are made the offerings of respect, esteem, and gratitude: These you have given me so mighty and peculiar reasons to have, in the highest degree, for your Lordship, that

if they can add a price to what they go along with, proportionable to their own greatness, I can with confidence brag, I here make your Lordship the richest present you ever received. This I am sure, I am under the greatest obligation to seek all occasions to acknowledge a long train of favours; favours, though great and important in themselves, yet made much more so by the forwardness, concern, and kindness, and other obliging circumstances, that never failed to accompany them. To all this, you are pleased to add that which gives yet more weight and relish to all the rest: You vouchsafe to continue me in some degrees of your esteem, and allow me a place in your good thoughts; I had almost said friendship. This, my Lord, your words and actions so constantly show on all occasions, even to others when I am absent, that it is not vanity in me to mention what every body knows: But it would be want of good manners, not to acknowledge what so many are witnesses of, and every day tell me, I am indebted to your Lordship for. I wish they could as easily assist my gratitude, as they convince me of the great and growing engagements it has to your Lordship. This, I am sure, I should write of the Understanding without having any, if I were not extremely sensible of them, and did not lay hold on this opportunity to testify to the world, how much I am obliged to be, and how much I am,

My LORD,

Your Lordship's

most Humble and

most Obedient Servant,

DORSET COURT, }
May 24. 1689. }

JOHN LOCKE.

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THE EPISTLE TO THE READER.

READER,

I HERE put into thy hands, what has been the diversion of some of my idle and heavy hours : If it has the good luck to prove so of any of thine, and thou hast but half so much pleasure in reading, as I had in writing it, thou wilt as little think thy money, as I do my pains, ill bestowed. Mistake not this, for a commendation of my work ; nor conclude, because I was pleased with the doing of it, that therefore I am fondly taken with it now it is done. He that hawks at larks and sparrows, has no less sport, though a much less considerable quarry, than he that flies at nobler game : And he is little acquainted with the subject of this treatise, the **UNDERSTANDING**, who does not know, that as it is the most elevated faculty of the soul, so it is employed with a greater and more constant delight, than any of the other. Its searches after truth, are a sort of hawking and hunting, wherein the very pursuit makes a great part of the pleasure. Every step the mind takes in its progress towards knowledge, makes some discovery, which is not only new, but the best too, for the time at least.

For the Understanding, like the eye, judging of objects only by its own sight, cannot but be pleased with what it discovers, having less regret for what has escaped it, because it is unknown. Thus he who has raised himself above the alms basket, and not content to live lazily on scraps of begged opinions, sets his own thoughts on work to find and follow truth (whatever he lights on), not miss the hunter's satisfaction : every moment of his pursuit will reward his pains with some delight, and he will have reason to think his time not ill spent, even when he cannot much boast of any great acquisition.

This, Reader, is the entertainment of those who let loose their own thoughts, and follow them in writing; which thou oughtest not to envy them, since they afford thee an opportunity of the like diversion, if thou wilt make use of thy own thoughts in reading. It is to them, if they are thy own, that I refer myself: But if they are taken upon trust from others, it is no great matter what they are; they not following truth, but some meaner consideration. And it is not worth while to be concerned, what he says or thinks, who says or thinks only as he is directed by another. If thou judgest for thyself, I know thou wilt judge candidly; and then I shall not be harmed or offended, whatever be thy censure. For though it be certain, that there is nothing in this treatise, of the truth whereof I am not fully persuaded; yet I consider myself as liable to mistakes, as I can think thee; and know, that this book must stand or fall with thee, not by any opinion I have of it, but thy own. If thou findest little in it new or instructive to thee, thou art not to blame me for it. It was not meant for those that had already mastered this subject, and made a thorough acquaintance with their own understandings; but for my own information, and the satisfaction of a few friends, who acknowledged themselves not to have sufficiently considered it. Were it fit to trouble thee with the history of this essay, I should tell thee, that five or six friends meeting at my chamber, and discoursing on a subject very remote from this, found themselves quickly at a stand, by the difficulties that rose on every side. After we had a while puzzled ourselves, without coming any nearer a resolution of those doubts which perplexed us, it came into my thoughts, that we took a wrong course; and that before we set ourselves upon inquiries of that nature, it was necessary to examine our own abilities, and see what objects our understandings were, or were not fitted to deal with. This I proposed to the company, who all readily assented; and thereupon it was agreed, that this should be our first inquiry. Some hasty and undigested thoughts, on a subject I had never before considered, which I set down against our

next meeting, gave the first entrance into this discourse; which having been thus begun by chance, was continued by entreaty; written by incoherent parcels: and, after long intervals of neglect, resumed again, as my humour or occasions permitted; and at last, in a retirement, where an attendance on my health gave me leisure, it was brought into that order thou now seest it.

This discontinued way of writing, may have occasioned, besides others, two contrary faults, *viz.* That too little and too much may be said in it. If thou findest any thing wanting, I shall be glad that what I have writ gives thee any desire that I should have gone farther: If it seems too much to thee, thou must blame the subject; for when I first put pen to paper, I thought all I should have to say on this matter, would have been contained in one sheet of paper; but the farther I went, the larger prospect I had: new discoveries led me still on, and so it grew insensibly to the bulk it now appears in. I will not deny, but possibly it might be reduced to a narrower compass than it is; and that some parts of it might be contracted: The way it has been writ in, by catches, and many long intervals of interruption, being apt to cause some repetitions. But to confess the truth, I am now too lazy, or too busy to make it shorter.

I am not ignorant how little I herein consult my own reputation, when I knowingly let it go with a fault, so apt to disgust the most judicious, who are always the nicest readers. But they who know sloth is apt to content itself with any excuse, will pardon me, if mine has prevailed on me; where, I think, I have a very good one. I will not therefore allege in my defence, that the same notion having different respects, may be convenient or necessary to prove or illustrate several parts of the same discourse; and that so it has happened in many parts of this: But waving that, I shall frankly avow, that I have sometimes dwelt long upon the same argument, and expressed it different ways, with a quite different design. I pretend not to publish this Essay for the information of men of large thoughts and quick apprehensions; to such masters of knowledge, I profess myself a scholar, and

therefore warn them before-hand not to expect any thing here, but what being spun out of my own coarse thoughts, is fitted to men of my own size; to whom, perhaps, it will not be unacceptable, that I have taken some pains to make plain and familiar to their thoughts some truths, which established prejudice, or the abstractness of the *ideas* themselves, might render difficult. Some objects had need be turned on every side; and when the notion is new, as I confess some of those are to me, or out of the ordinary road, as I suspect they will appear to others, it is not one simple view of it, that will gain it admittance into every understanding, or fix it there with a clear and lasting impression. There are few, I believe, who have not observed in themselves or others, that what in one way of proposing was very obscure, another way of expressing it has made very clear and intelligible: though afterward the mind found little difference in the phrases, and wondered why one failed to be understood more than the other. But every thing does not hit alike upon every man's imagination. We have our understandings no less different than our palates; and he that thinks the same truth shall be equally relished by every one in the same dress, may as well hope to feast every one with the same sort of cookery: the meat may be the same, and the nourishment good, yet every one not be able to receive it with that seasoning; and it must be dressed another way; if you will have it go down with some, even of strong constitutions. The truth is, those who advised me to publish it, advised me, for this reason, to publish it as it is: and since I have been brought to let it go abroad, I desire it should be understood by whoever gives himself the pains to read it. I have so little affection to be in print, that if I were not flattered this Essay might be of some use to others, as I think it has been to me; I should have confined it to the view of some friends, who gave the first occasion to it. My appearing therefore in print, being on purpose to be as useful as I may, I think it necessary to make what I have to say, as easy and intelligible to all sorts of readers, as I can. And I had much rather the specula-

tive and quick-sighted should complain of my being in some parts tedious, than that any one, not accustomed to abstract speculations, or prepossessed with different notions, should mistake, or not comprehend my meaning.

It will possibly be censured as a great piece of vanity or insolence in me, to pretend to instruct this our knowing age; it amounting to little less, when I own, that I publish this *Essay* with hopes it may be useful to others. But if it may be permitted to speak freely of those, who, with a feigned modesty, condemn as useless, what they themselves write, methinks it favours much more of vanity or insolence, to publish a book for any other end; and he fails very much of that respect he owes the public, who prints, and consequently expects men should read that, wherein he intends not they should meet with any thing of use to themselves or others: and should nothing else be found allowable in this treatise, yet my design will not cease to be so; and the goodness of my intention ought to be some excuse for the worthlessness of my present. It is that chiefly which secures me from the fear of censure, which I expect not to escape more than better writers. Men's principles, notions, and reliques are so different, that it is hard to find a book which pleases or displeases all men. I acknowledge the age we live in is not the least knowing, and therefore not the most easy to be satisfied. If I have not the good luck to please, yet nobody ought to be offended with me. I plainly tell all my readers, except half a dozen, this treatise was not at first intended for them; and therefore they need not be at the trouble to be of that number. But yet if any one thinks fit to be angry, and rail at it, he may do it securely: for I shall find some better way of spending my time, than in such kind of conversation. I shall always have the satisfaction to have aimed sincerely at truth and usefulness, though in one of the meanest ways. The commonwealth of learning is not at this time without master-builders, whose mighty designs, in advancing the sciences, will leave lasting monuments to the admiration of posterity: but every one must not hope to be a *Boyle* or a *Sydenham*; and in an age that produces

such masters, as the great *Huygenius*, and the incomparable Mr. *Newton*, with some other of that strain; it is ambition enough to be employed as an under-labourer in clearing ground a little, and removing some of the rubbish that lies in the way to knowledge; which certainly had been very much more advanced in the world, if the endeavours of ingenious and industrious men had not been much cumbered with the learned, but frivolous use of uncouth, affected, or unintelligible terms, introduced into the sciences, and there made an art of, to that degree, that philosophy, which is nothing but the true knowledge of things, was thought unfit, or incapable to be brought into well bred company, and polite conversation. Vague and insignificant forms of speech, and abuse of language, have so long passed for mysteries of science; and hard or misapplied words, with little or no meaning, have by prescription, such a right to be mistaken for deep learning, and height of speculation, that it will not be easy to persuade, either those who speak, or those who hear them, that they are but the covers of ignorance, and hinderance of true knowledge. To break in upon the sanctuary of vanity and ignorance, will be, I suppose, some service to human understanding: though so few are apt to think, they deceive or are deceived in the use of words; or that the language of the sect they are of, has any faults in it, which ought to be examined or corrected; that I hope I shall be pardoned, if I have in the third book dwelt long on this subject; and endeavoured to make it so plain, that neither the inveterateness of the mischief, nor the prevalency of the fashion, shall be any excuse for those, who will not take care about the meaning of their own words, and will not suffer the significancy of their expressions to be inquired into.

I have been told, that a short epitome of this treatise, which was printed 1688, was by some condemned without reading, because innate *ideas* were denied in it; they too hastily concluding, that if innate *ideas* were not supposed, there would be little left, either of the notion or proof of spirits. If any one take the like offence at the entrance of this treatise, I shall desire him to read it

thorough; and then I hope he will be convinced, that the taking away false foundations, is not to the prejudice, but advantage of truth; which is never injured or endangered so much, as when mixed with, or built on falsehood. In the second edition, I added as followeth:

The bookseller will not forgive me, if I say nothing of this second edition, which he has promised, by the correctness of it, shall make amends for the many faults committed in the former. He desires too, that it should be known, that it has one whole new chapter concerning *Identity*, and many additions and amendments in other places. These, I must inform my reader, are not all new matter, but most of them either farther confirmation of what I had said, or explications, to prevent others being mistaken in the sense of what was formerly printed, and not any variation in me from it: I must only except the alterations I have made in Book II. Chap. 21.

What I had there writ concerning *liberty* and the *will*, I thought deserved as accurate a view as I was capable of: those subjects having in all ages, exercised the learned part of the world with questions and difficulties, that have not a little perplexed morality and divinity; those parts of knowledge that men are most concerned to be clear in. Upon a closer inspection into the working of men's minds, and a stricter examination of those motives and views they are turned by, I have found reason somewhat to alter the thoughts I formerly had concerning that, which gives the last determination to the *will* in all voluntary actions. This I cannot forbear to acknowledge to the world, with as much freedom and readiness, as I at first published what then seemed to me to be right, thinking myself more concerned to quit and renounce any opinion, than oppose that of another, when truth appears against it. For it is truth alone I seek, and that will always be welcome to me, when, or from whencesoever it comes.

But what forwardness soever I have to resign any opinion I have, or to recede from any thing I have writ, upon the first evidence of an error in it; yet this I must own, that I have not had the good luck to receive any

light from those exceptions I have met with in print against any part of my book; nor have, from any thing has been urged against it, found reason to alter my sense, in any of the points have been questioned. Whether the subject I have in hand requires often more thought and attention, than cursory readers, at least such as are prepossessed, are willing to allow; or whether any obscurity in my expressions casts a cloud over it, and these notions are made difficult to others apprehension in my way of treating them: So it is, that my meaning, I find, is often mistaken, and I have not the good luck to be every where rightly understood. There are so many instances of this, that I think it justice to my reader and myself, to conclude, that either my book is plainly enough written to be rightly understood by those who peruse it with that attention and indifferency, which every one, who will give himself the pains to read, ought to employ in reading: or else that I have writ mine so obscurely, that it is in vain to go about to mend it. Which ever of these be that truth, it is myself only am affected thereby, and therefore I shall be far from troubling my reader with what I think might be said, in answer to those several objections I have met with, to passages here and there of my book. Since I persuade myself, that he who thinks them of moment enough to be concerned, whether they are true or false, will be able to see, that what is said, is either not well founded, or else not contrary to my doctrine, when I and my opposer come both to be well understood.

If any, careful that none of their good thoughts should be lost, have published their censures of my *Essay*, with this honour done to it, that they will not suffer it to be an *Essay*; I leave it to the public to value the obligation they have to their critical pens, and shall not waste my reader's time in so idle or ill-natured an employment of mine, as to lessen the satisfaction any one has in himself, or gives to others in so hasty a confutation of what I have written.

The bookseller's preparing for the fourth edition of my *Essay*, gave me notice of it, that I might, if I had leisure, make any additions or alterations I should think

fit. Whereupon I thought it convenient to advertise the reader, that besides several corrections I had made here and there, there was one alteration which it was necessary to mention, because it ran through the whole book, and is of consequence to be rightly understood. What I thereupon said was this :

Clear and distinct ideas are terms, which though familiar and frequent in men's mouths, I have reason to think every one who uses, does not perfectly understand. And possibly it is but here and there one, who gives himself the trouble to consider them so far as to know what he himself or others precisely mean by them: I have therefore in most places chose to put *determinate* or *determined*, instead of *clear* and *distinct*, as more likely to direct men's thoughts to my meaning in this matter. By those denominations, I mean some object in the mind, and consequently *determined*, i. e. such as it is there seen and perceived to be. This, I think, may fitly be called a *determinate* or *determined idea*, when such as it is at any time objectively in the mind, and so *determined* there, it is annexed, and without variation, *determined* to a name or articulate sound, which is to be steadily the sign of that very same object of the mind, or *determinate idea*.

To explain this a little more particularly. By *determinate*, when applied to a simple *idea*, I mean that simple appearance which the mind has in its view, or perceives in itself, when that *idea* is said to be in it: By *determined*, when applied to a *complex idea*, I mean such an one as consists of a determinate number of certain simple or less complex *ideas*, joined in such a proportion and situation, as the mind has before its view, and sees in itself when that *idea* is present in it, or should be present in it, when a man gives a name to it. I say *should* be; because it is not every one, nor perhaps any one, who is so careful of his language, as to use no word, till he views in his mind the precise *determined idea*, which he resolves to make it the sign of. The want of this, is the cause of no small obscurity and confusion in men's thoughts and discourses.

I know there are not words enough in any language, to answer all the variety of *ideas*, that enter into men's discourses and reasonings. But this hinders not, but that when any one uses any term, he may have in his mind a *determined idea*, which he makes it the sign of, and to which he should keep it steadily annexed, during that present discourse. Where he does not or cannot do this, he in vain pretends to *clear or distinct ideas*: It is plain his are not so; and therefore there can be expected nothing but obscurity and confusion, where such terms are made use of, which have not such a precise determination.

Upon this ground I have thought *determined ideas* a way of speaking less liable to mistake, than *clear and distinct*: And where men have got such *determined ideas* of all that they reason, inquire, or argue about, they will find a great part of their doubts and disputes at an end. The greatest part of the questions and controversies that perplex mankind, depending on the doubtful and uncertain use of words, or (which is the same), *indetermined ideas*, which they are made to stand for; I have made choice of these terms to signify, 1. Some immediate object of the mind, which it perceives and has before it, distinct from the sound it uses as a sign of it. 2. That this *idea*, thus *determined*, i. e. which the mind has in itself, and knows and sees there, be *determined* without any change to that name, and that name *determined* to that precise *idea*. If men had such *determined ideas* in their inquiries and discourses, they would both discern how far their own inquiries and discourses went, and avoid the greatest part of the disputes and wranglings they have with others.

Besides this, the bookseller will think it necessary I should advertise the reader, that there is an addition of two chapters wholly new; the one of *The Association of Ideas*, the other of *Enthusiasm*. These, with some other larger additions never before printed, he has engaged to print by themselves after the same manner, and for the same purpose, as was done when this Essay had the second impression.

THE

LIFE OF THE AUTHOR.

MR. JOHN LOCKE was the son of John Locke of Pensford, in Somersetshire. He was born at Wrington, seven or eight miles from Bristol, and, according to the parish-register, baptised the 29th of August 1632. His father was heir to a much greater estate than he left behind him, and was captain in the Parliament's army during the civil wars under King Charles I. It is possible that he lost part of his estate through the misfortunes of the war; for our author always spoke of his father with great respect, as a man of strict probity and sobriety. Though his parents married very young, they had but two children, of whom John, the subject of these memoirs, was the elder. The younger son died of a consumption in his minority. Mr. Locke's father took great care of him in his education, and observed a method of conduct towards him, which his son often mentioned with great approbation. He kept him at a great distance while he was a child; but as he grew up, he used him with more familiarity, till at last they lived together, rather as friends, than as two persons, one of whom might justly claim respect from the other. Our author began his studies in West-

minster school, where he continued till the year 1651; and from thence was sent to Christ-Church college in Oxford. He took the degree of Bachelor of Arts in 1655, and that of Master in 1658. But though he made this progress in the usual course of studies at that time, yet he often said, that what he had learned there was of little use to him, to enlighten and enlarge his mind. The first books which gave him a relish for the study of philosophy, were the writings of Des Cartes; for though he did not always approve of his sentiments, he found that he wrote with great perspicuity. After some time, he applied himself very closely to the study of medicine; not with any design of practising as a physician, but principally for the benefit of his own constitution, which was but weak. And we find he gained such esteem for his skill, even amongst the most learned of the Faculty of his time, that Dr. Thomas Sydenham, in his book entitled, "*Observationes medicæ circa morborum acutorum, historiam, et curationem*," gives him a high encomium, in these words: "You know," says he, "likewise, how much my method has been approved of, by a person who has examined it to the bottom, and who is our common friend, I mean Mr. John Locke; who, if we consider his genius, and penetrating and exact judgment, or the purity of his morals, has scarce any superior, and few equals, now living." Hence he was very often saluted by his acquaintance with the title, though he never took the degree, of Doctor of Medicine*." In the year 1664, Sir William Swan being appointed envoy from the English court to the Elector of Brandenburg, and some other German princes, Mr. Locke attended him in the quality of his secretary; but returning to England again within the year, he applied himself with great vigour

* After the preface of Dr. Sydenham's book, follow some Latin elegiac verses of Mr. Locke's, which are full of wit and invention: but the style is not accurate and poetical. He had too little esteem for the poets to spend much time in reading them, and to take much pains in imitating them. He subscribes these verses in this manner: "J. Locke, Artium Magister, ex Æde Christi, Oxon."

to his studies, and particularly to that of natural philosophy*.

While he was at Oxford in 1666, he became acquainted with the Lord Ashley, afterwards Earl of Shaftesbury. The occasion of their acquaintance was this: Lord Ashley, by a fall, had hurt his breast in such a manner, that there was an abscess formed in it under his stomach. He was advised to drink the mineral waters at Astrop, which engaged him to write to Dr. Thomas, a physician of Oxford, to procure a quantity of these waters, which might be ready against his arrival. Dr. Thomas, being obliged to be absent from Oxford at that time, desired his friend Mr. Locke to execute this commission. But it happened that the waters not being ready the day after the Lord Ashley's arrival, through the fault of the person who had been sent for them, Mr. Locke was obliged to wait on his Lordship, to make an excuse for it. Lord Ashley received him with great civility, according to his usual manner, and was satisfied with his excuses. Upon his rising to go away, his Lordship, who had already received great pleasure from his conversation, detained him to supper, and engaged him to dine with him the next day, and even to drink the waters, that he might have the more of his company. When his Lordship left Oxford to go to Sunning Hill, where he drank the waters, he made Mr. Locke promise to come thither; as he did in the summer of the year 1667. Lord Ashley afterwards returned, and obliged him to promise that he would come and lodge at his house. Mr. Locke went thither; and though he had never practised physic, his Lordship confided entirely in his advice, with regard to the operation which was to be performed by opening the abscess in his breast; which saved his life, though

* This appears from the journal which he kept of the changes of the air, from the 24th of June 1666 to the 28th of March 1667; for the regular observation of which he used a barometer, thermometer, and hygroscope. This journal may be seen in "the General History of the Air," published by Mr. Boyle in 1692.

it never closed afterwards. After this cure, his Lordship entertained so great an esteem for Mr. Locke, that though he had experienced his great skill in medicine, yet he regarded this afterwards as the least of his qualifications. He advised him to turn his thoughts another way, and would not suffer him to practise medicine out of his house, except among some of his particular friends. He urged him to apply himself to the study of political and religious matters; in which Mr. Locke made so great a progress, that Lord Ashley began to consult him upon all occasions. By his acquaintance with this Lord, our author was afterwards introduced to the conversation of some of the most eminent persons of that age, such as Villiers Duke of Buckingham, the Lord Halifax, and other noblemen of the greatest wit and parts, who were all charmed with his conversation. The liberty which Mr. Locke took with men of that rank had something in it very suitable to his character. One day, three or four Lords having met at Lord Ashley's, when Mr. Locke was there; after some compliments, cards were brought in, before scarce any conversation had passed between them. Mr. Locke looked upon them for some time, while they were at play; and then, taking his pocket-book, began to write with great attention. One of the Lords observing him, asked him what he was writing. "My Lord," says he, "I am endeavouring to profit as far as I am able in your company; for having waited with impatience for the honour of being in an assembly of the greatest geniuses of this age, and at last having obtained the good fortune, I thought I could not do better than write down your conversation; and indeed I have set down the substance of what hath been said for this hour or two." Mr. Locke had no occasion to read much of this conversation; those Noble persons saw the ridicule of it, and diverted themselves with improving the jest. They quitted their play, and, entering into rational discourse, spent the rest of the time in a manner more suitable to their character.

In 1668, our author attended the Earl and Countess of Northumberland into France; but did not continue there long; because, the Earl dying in his journey to Rome, the Countess, whom he had left in France with Mr. Locke, returned to England sooner than was at first designed. Mr. Locke, upon his return to his native country, lived, as before, at the Lord Ashley's, who was then Chancellor of the Exchequer; but made frequent visits to Oxford, for consulting books in the prosecution of his studies, and keeping the changes of the air. While he was at the Lord Ashley's, he inspected the education of that Lord's only son, who was then about sixteen years of age. This province he executed with great care, and to the full satisfaction of his Noble patron. The young Lord being of a very weakly constitution, his father thought to marry him betimes, lest the family should be extinct by his death. He was too young, and had too little experience to choose a wife for himself; and Lord Ashley having the highest opinion of Mr. Locke's judgment, and the greatest confidence in his integrity, desired that he would make a suitable choice for his son. This, it must be owned, was no easy province; for though Lord Ashley did not require a great fortune for his son, yet he would have him marry a lady of a good family, an agreeable temper, and a fine person, and above all a lady of good education, and good understanding, whose conduct would be very different from that of the generality of court-ladies. Notwithstanding all these difficulties, our author undertook the business, and acquitted himself in it very happily.

From this marriage sprung seven children, all very healthy, though the father was of so weakly a constitution. The eldest son, afterwards the Noble author of the *Characteristicks*, was committed to the care of Mr. Locke in his education. Here was a great genius, and a great master to direct and guide it, and the success was every way equal to what might be expected. It is said, that this Noble author always spoke of Mr. Locke with the highest esteem, and manifested, on all occa-

sions, a grateful sense of his obligations to him. But there are some passages in his works, in which he speaks of Mr. Locke's philosophy with great severity *.

* In the "letters written by a nobleman to a young man at the university," published 1716, which are now known to be Lord Shaftesbury's, having observed, that Dr. Tindal's principles, whatever they were as to church-government, yet in morals and theology were very different from the author's of the "Rhapsody," he proceeds thus: "In general, truly it has happened, that all those they call free writers now-a-days have espoused these principles which Mr. Hobbes set a-foot in this last age. Mr. Locke, as much as I honour him on account of his other writings (viz. on Government, Policy, Trade, Coin, Education, Toleration, &c.), and as well as I knew him, and can answer for his sincerity as a most zealous Christian, and believer, did however go in the self-same track, and is followed by the Tindals, and all the other ingenious free authors of our time. It was Mr. Locke that struck the home-blow; for Mr. Hobbes's character, and base slavish principles on government, took off the poison of his philosophy. It was Mr. Locke that struck at the fundamentals, threw all order and virtue out of the world, and made the very ideas of these (which are the same as those of God) unnatural, and without foundation in our minds. "Innate" is a word he poorly plays upon: the right word, though less used, is "connatural." For what has birth, or progress of the fetus out of the womb, to do in this case? The question is not about the time the ideas entered, or the moment that one body came out of the other; but whether the constitution of men be such, that being adult, and grown up, at such or such a time, sooner or later (no matter when), the idea and sense of order, administration, and a God, will not infallibly, inevitably, necessarily, spring up in him." Then comes the credulous Mr. Locke, with his Indian barbarian stories of wild nations, that have no such idea (as travellers, learned authors! and men of truth! and great philosophers! have informed him); not considering, that this is but a negative upon a hearsay, and so circumstantiated, that the faith of the Indian denier may be as well questioned as the veracity of the judgment of the relater, who cannot be supposed to know sufficiently the mysteries and secrets of those barbarians, whose language they but imperfectly know, and to whom we good Christians have, by our little mercy, given sufficient reason to conceal many secrets from us, as we know particularly in respect of simples and vegetables, of which, though we got the Peruvian bark, and some other noble remedies, yet it is certain, that through the cruelty of the Spaniards, as they have owned themselves, many secrets in medicinal affairs have been suppressed." And again, "But Mr. Locke, who had more faith, and was more learned in modern wonder-writers, than in ancient philosophy, gave up an argument for the Deity, which Cicero, though a professed sceptic, would not explode, and which even the
"chief.

In 1670, and the year following, our author began to form the plan of his "Essay on Human Understanding," at the earnest request of Mr. Tyrrell, Dr. Thomas, and some other friends, who met frequently in his chamber to converse together on philosophical subjects; but his employments and avocations prevented him from finishing it then. About this time, it is supposed, he was made a fellow of the Royal Society.

In 1672, his great patron, Lord Ashley, was created Earl of Shaftesbury, and Lord High Chancellor of England, who appointed him Secretary of the Presentation of Benefices; which place he held till the end of the year 1673, when his Lordship resigned the Great Seal. Mr. Locke, to whom the Earl had communicated his most secret affairs, was disgraced together with him; and assisted the Earl in publishing some treatises, which were designed to excite the people to watch the conduct of the Roman Catholics, and to oppose the arbitrary designs of the Court.

"chief of the Atheistic philosophers anciently acknowledged, and solved only by their *"primus in orbe Deos fecit timor."* Thus "virtue, according to Mr. Locke, has no other measure, law, or rule, than fashion and custom. Morality, justice, equity, depend only on law and will; and God indeed is a perfect *"free agent"* in his sense; i. e. *"free to any thing, however ill;"* for if he wills it, it will be made good: virtue may be vice, and vice virtue in its turn, if he pleases: and thus, neither right nor wrong, virtue nor vice, are any thing in themselves; nor is there any trace or idea of them naturally imprinted on human minds. Experience and our Catechism teaches all! I suppose it is something of the like kind, which teaches birds their nests, and how to fly the minute they have full feathers. Your Theocles (one of the interlocutors in that rhapsody), whom you commend so much, laughs at this, and as modestly as he can, asks a Lockist, whether the idea of women, and what is sought after in women, be not taught also by some catechism, and dictated to the man. Perhaps, if we had no school of Venus, nor such horrid lewd books, and lewd companions, we might have no understanding of this, till we were taught by our parents; and if the tradition should happen to be lost, the race of mankind might perish in a sober nation. This is very poor philosophy. But the gibberish of the schools for these several centuries has, in these later days of liberty, made any contrary philosophy of good relish, and highly savoury with all men of wit, such as have been emancipated from that egregious form of intellectual bondage." However,

In 1675, he travelled into France, on account of his health. At Montpellier he stayed a considerable time; and there his first acquaintance arose with Mr. Herbert, afterwards Earl of Pembroke, to whom he dedicated his Essay on Human Understanding, having the highest respect for that Noble Lord. From Montpellier he went to Paris, where he contracted a friendship with Mr. Justel, whose house was at that time the place of resort for men of letters; and there he saw M. Guenelon, the famous physician of Amsterdam, who read lectures in anatomy with great applause. He became acquainted likewise with Mr. Soignard, who showed him a copy of his "*Harmonia Evangelica*," which gave great pleasure to Mr. Locke, as he had a high value for the scriptures. The Earl of Shaftesbury being restored to favour at Court, and made President at the Council in 1679, thought proper to send for Mr. Locke to London: But that Nobleman did not continue long in his post; for refusing to comply with the designs of the Court, which aimed at the establishment of popery and arbitrary power, fresh crimes were laid to his charge, and he was sent to the Tower; when the Earl obtained his discharge from that place, he retired to Holland; and Mr. Locke, not thinking himself safe in England, followed his Noble Patron thither, who died soon after. During our author's stay in Holland, he renewed his acquaintance with M. Guenelon, who introduced him to many learned persons of Amsterdam. Here Mr.

ever, he speaks very highly of Mr. Locke's Essay on Human Understanding.—Says, "that it may as well qualify men for business and the world, as for the sciences and university." "No one," says he, "has done more towards the recalling of philosophy from barbarity into the use and practice of the world, and into the company of the better and politer sort, who might well be ashamed of it in its other dress. No one has opened a better and clearer way to reasoning." These letters, which are full of good instruction, were written by Lord Shaftesbury to Mr. Ainsworth, then a student at the university at that Lord's own expence. He was the son of a domestic servant of that noble Lord, to whom he gave a learned education; and he proved a good and pious man, though he never distinguished himself according to his patron's expectations.

Locke contracted a friendship with Mr. Limborch, professor of divinity among the Remonstrants, and the most learned Mr. Le Clerc, which he cultivated after his return into England, and continued to the end of his life.

During his residence in Holland, he was accused at Court of having written certain tracts against the government, which were afterwards discovered to be written by another person; and upon that suspicion he was deprived of his place of student of Christ Church.

After the death of King Charles II. Mr. William Penn, who had known our author at the University, used his interest with King James to procure a pardon for him; and would have obtained it, if Mr. Locke had not answered that he had no occasion for a pardon, since he had not been guilty of any crime. In the year 1685, when the Duke of Monmouth and his party were making preparations in Holland for his unfortunate enterprise, the English Envoy at the Hague had orders to demand Mr. Locke and eighty-three other persons to be delivered up to the States General, upon which he lay concealed to the year following*. During this confinement, our author wrote his letter of

* Mr. Le Clerc observes, that Mr. Locke had no correspondence with the Duke of Monmouth, having no great opinion of his undertaking. Besides, his natural temper was timorous, not resolute, and he was far from being fond of commotions. He had been at the end of the year 1684 at Utrecht, and returned in the spring to Amsterdam, with a design to go again to Utrecht, as he actually did, to avoid being charged with having any share in the Duke of Monmouth's enterprise. He had before some inclination to lodge with his friend M. Guenelon; but he excused himself, it not being the custom of that city to admit strangers to lodge, though he received Mr. Locke with great civility. But when M. Guenelon saw that his friend was in real danger, he served him with great generosity. He spoke to Mr. Veen his father-in-law, and engaged him to receive Mr. Locke into his house. Upon this Mr. Locke came to Amsterdam, where he lay concealed at Mr. Veen's house two or three months. In the mean time, Mr. Limborch took care to deliver him the letters which were written to him, and had the custody of Mr. Locke's will, who desired him to send it to some of his relations, whom he named, if he should die. One of the principal magistrates of the city was consulted.

Toleration, which was first published in Latin, and entitled, "*Epistola de Tolerantia ad Clarissimum Virum, T. A. R. P. T. O. L. A. Scripta a P. A. P. O. I. L. A.*" The first letters signify, "*Theologiæ apud Remonstrantes Professore, Tyrannidis Oso, Limburgum Amstelodamensem; and the latter, Pacis Amico, Persecutionis Oso, Johanne Locke Anglo.*" This letter he afterwards translated into English, and published at London in the year 1690*.

At Amsterdam he formed a weekly assembly, consisting of Mr. Limborch, Mr. Le Clerc, and others, for conversation upon important subjects: But these conferences were much interrupted, by the frequent changes he was forced to make of the places of his residence.

Our author's great work, the "*Essay concerning Human Understanding,*" he had been employed about for some years, and he finished it in Holland about the end of the year 1687. He made an abridgment of it himself, which his friend Mr. Le Clerc translated into French, and inserted in one of his "*Bibliothiques.*"

consulted, whether he might continue there in safety; but that magistrate answered, "That they could not protect him, if the king of England should demand him; however, that he should not be betrayed, and that his landlord should have timely notice when there should be occasion." This gave him some kind of confidence, and he continued with Mr. Veen for some time, without going abroad, except at night, for fear of being known. In the mean time he was persuaded to go to Cleves, but returned in about two months time, and lodged again at Mr. Veen's. At the end of the year he went to live with M. Guenelon, where he was likewise the year following. In 1686 he began to appear again in public, because it was sufficiently known that he had no share in the Duke of Monmouth's invasion. In autumn he went to Utrecht, and at the end of the year returned to Amsterdam, and lodged at M. Guenelon's as before.

* This letter was so highly approved of in Holland, that it was immediately translated into Dutch. But it was very severely attacked by a clergyman of Oxford, who wrote no less than three pamphlets against it; two of which our author answered, defending his principles with invincible strength of argument; and though he was in a declining state of health, when his antagonist, after twelve years silence, published his third pamphlet against it, yet he began a reply to him in a "fourth letter concerning Toleration." Though this was not finished, yet the fragment is published in Desmaizeaux's collection of his works.

This abridgment was so highly approved of by all persons of understanding, and sincere lovers of truth, that they expressed the strongest desire to see the whole work.

At length the happy Revolution in 1688, by the courage and good conduct of the Prince of Orange, opened a way for Mr. Locke's return into his own country, whither he came in the fleet which conveyed the Princess of Orange: And, upon the restoration of public liberty, he thought it proper to assert his own private rights. He endeavoured, therefore, to procure his restoration to his place of student of Christ Church; not that he designed to return thither, but only that it might appear from thence that he had been unjustly deprived of it. But when he found that the College could not be prevailed on to dispossess the person who had been elected in his room, and that they would only admit him as a supernumerary student, he desisted from his claim. He was now at full liberty to pursue his speculations; and accordingly in the year 1689, he published his "*Essay on Human Understanding*." This work, which has made our Author's name immortal, and which does honour to our country, gave great offence to many people at the first publication. It was proposed at a meeting of the heads of houses of the University of Oxford, to censure and discourage the reading of it; and after various debates among themselves, it was concluded that each head of an house should endeavour to prevent its being read in his college. The reason of this is obvious; Mr. Locke had let in more light upon the minds of men than was consistent with the dark designs of some persons.

In the same year, Mr. Locke also published his "*Two Treatises on Government*," in which he fully vindicated the principles upon which "*the Revolution*" was founded, and entirely overturned all the doctrines of slavery.

His writings had now procured him such high esteem, and he had merited so much of the government, that it would have been easy for him to have obtained a

very considerable post; but he contented himself with that of "Commissioner of Appeals," worth about 200*l. per annum*. He was offered to go abroad in a public character; and it was left to his choice whether he would be Envoy at the Court of the Emperor, the Elector of Brandenburg, or any other where he thought the gain most suitable to him; but he declined it, on account of his ill health.

About this time the public coin was very bad, having been so much clipped, and no care used to remedy it, that it wanted about a third of its due value. The effect of this was, that the people thought themselves a great deal richer than indeed they were; for though the coin was yet raised in its value by public authority, it was put off in trade for above a third part more than it weighed. Mr. Locke had observed this disorder ever since his return to England, and he frequently spoke of it, that some measures might be taken to prevent it. He said, "that the nation was in greater danger from a secret unobserved abuse, than from all those other evils, of which persons were generally so apprehensive; and that if care was not taken to rectify the coin, that irregularity alone would prove fatal to us, though we should succeed in every thing else." One day when he seemed very much disturbed about this matter, some persons rallied him, as if he tormented himself with a groundless fear; he answered, "that persons might laugh if they pleased, but they would find in a very short time, that if care was not taken, we should want money in England to buy bread." And accordingly there were such disorders on this account, that the Parliament took the matter into the most serious consideration. To assist the great men at the head of affairs (who are not always the best judges) to form a right understanding of this matter, and to excite them to rectify this shameful abuse, Mr. Locke published a little treatise, entitled, "Some Considerations of the Consequences of the lowering of the Interest, and raising the Value of Money;" in which there are many nice and curious ob-

servations on both these subjects, as well as on trade in general. This treatise was shortly followed by two more upon the same subject, in which he obviated all objections, and confuted all his opposers.

He fully showed to the world by these discourses, that he was as able to reason on trade and business as on the most abstract points of science, and that he was none of these philosophers who spent their lives in search of truths merely speculative, and who, by their ignorance of these things which concern the public good, are incapable of serving their country. These writings recommended him to the notice of the greatest persons, with whom he used to converse very freely. He held weekly conferences with the Earl of Pembroke, then Lord Keeper of the Privy Seal; and when the air of London began to affect his lungs, he went for some days to the Earl of Peterborough's seat, near Fulham, where he always met with the most friendly reception: but he was obliged afterwards entirely to leave London, at least all the winter season, and go to some place at a greater distance. He had made frequent visits at different times to Sir Francis Masham's, who lived at Oates in Essex; where he found the air so good, so agreeable to his constitution, and the society there so delightful, that he was easily prevailed with to become one of the family, and to settle there during his life. He was received upon his own terms, that he might have his entire liberty, and look upon himself as at his own house. Here he applied himself to his studies as much as his weak health would allow, being seldom absent, because the air of London became more and more troublesome to him. He came to town only in the summer for three or four months, and if he returned to Oates any thing indisposed, the air of that place soon recovered him.

In 1693 he published his "Thoughts concerning the Education of Children;" but he improved it considerably afterwards.

In 1695 Mr. Locke published his treatise of "the Reasonableness of Christianity," in which he has

proved that the Christian religion, as delivered in the scriptures, and free from all corrupt mixtures, is the most reasonable institution in the world. This book was attacked by an ignorant but zealous divine, Dr. Edwards, in a very rude and scurrilous manner. Mr. Locke answered Edwards, and defended his answer with such strength of reason, that he might justly have expected from his adversary a public acknowledgment of his error, if he had not been one of those writers who have no more shame than reason in them. Mr. Locke was also obliged to Mr. Bolde, a worthy and pious clergyman, for vindicating his principles against the cavils of Edwards.

Some time before this, Mr. Toland published a book, entitled, "Christianity not Mysteious," in which he endeavoured to prove, "that there is nothing in the Christian religion not only contrary to reason, but even nothing above it." Mr. Toland, in explaining some of his notions, used several arguments, from Mr. Locke's "Essay on Human Understanding." Some Unitarians also about this time published several treatises, in which they affirmed, that there was nothing in the Christian religion but what was rational and intelligible; and Mr. Locke having asserted in his writings that revelation delivers nothing contrary to reason: These things engaged Dr. Stillingfleet, the learned bishop of Worcester, to publish a treatise, in which he endeavoured to defend the doctrine of the Trinity against Mr. Toland and the Unitarians. In this treatise, the bishop opposed some of Mr. Locke's principles, judging them heretical, and favouring the above mentioned writers. Mr. Locke answered him, and the bishop replied the same year. This reply was confuted by a second letter of Mr. Locke's, which drew a second answer from the bishop in 1695. And Mr. Locke again replied in a third letter, wherein he treated more largely of "the certainty of reason by ideas, of the certainty of faith, of the resurrection of the same body, and the immateriality of the soul." He showed the perfect agreement of his principles with the Chri-

stian religion, and that he had advanced nothing which had the least tendency to scepticism, which the bishop had very ignorantly charged him with. But the bishop died some time after this, and the dispute ended. In this controversy, every body admired the strength of Mr. Locke's reasoning, his great clearness and exactness, both in explaining his own notions and principles, and confuting those of his adversary. Nor were men of understanding less surpris'd, that so learned a man as the bishop should engage in a controversy, wherein he had all the disadvantages possible; for he was by no means able to maintain his opinions against Mr. Locke, whose reasoning he neither understood, nor the thing itself about which he disputed. This learned bishop had spent the greatest part of his time in the study of ecclesiastical antiquities, and reading a prodigious number of books, but was no great philosopher; nor had he ever accustomed himself to that close way of thinking and reasoning in which Mr. Locke did so highly excel. However, though our philosopher had so great a victory over the bishop, and had reason to complain of the bishop's unjust charges against him, and for his writing on subjects, of which he was so grossly ignorant; yet he did not make an insolent triumph over his ignorance, but in the confutation of his errors treated him with great respect. He shows, indeed, that the bishop did not understand the subject he wrote about; and that he was very incorrect and inaccurate in his expressions: but he rather insinuates this, by producing the bishop's own words, and leaving his readers to judge than reflect on him for it. In short, never was a controversy managed with so much skill and art on one side, nor on the other, so unjustly, confusedly, or so little to the credit of the author. Time, which is the best judge of things, has abundantly manifested this. The bishop's writings on that subject are neglected, and buried in oblivion; but those of our author will live for ever.

In 1695, Mr. Locke was appointed one of the Commissioners of Trade and Plantations, a place worth 1000l.

per annum. The duties of this post he discharged with much care and diligence, and with universal approbation: He continued in it till the year 1700, when, upon the increase of his asthmatic disorder, he was forced to resign it.

He acquainted no person with his design of leaving that place, till he had given up his commission into the king's own hands. The king was very unwilling to dismiss him, and told our author, that he would be very well pleased with his continuance in that office, though he should give little or no attendance; for that he did not desire him to stay in town one day to the hurt of his health. But Mr. Locke told the king, that he could not in conscience hold a place to which such a salary was annexed, without discharging the duties of it; and therefore he begged leave to resign it. King William had a great esteem for our author, and would sometimes send for him to discourse on public affairs, and to know his sentiments of things. Mr. Locke once told the king very plainly, that if the Universities were not reformed, and other principles taught there than had been formerly inculcated, they would either destroy him, or some of his successors, or both.

The last fourteen or fifteen years of his life Mr. Locke spent chiefly at Oates, seldom coming to town; and, during this agreeable retirement, he applied himself to the study of the scriptures, of the divinity of which he was thoroughly persuaded. This study produced in him a very lively and sincere piety, without any affectation. He admired the wisdom and goodness of God in the method found out for the salvation of mankind: and when he thought upon it, he could not forbear crying out, "O the depth of the riches of the goodness and knowledge of God." He was persuaded that men would be convinced of this, by reading the scriptures without prejudice; and he frequently exhorted those with whom he conversed to a serious study of these sacred writings. His own application to this study had given him a more noble and elevated idea of the Christian religion than he had before: and if his

strength would have allowed him to begin new works, it is probable that he would have written some, in order to inspire others with the same grand and sublime idea. There is a fine ode of Dr. Watts in his *Lyric Poems*, on occasion of Mr. Locke's dangerous illness, some time after he had retired to study the scriptures. It is inscribed to John Shute, Esq. afterwards Lord Barrington, and author of the *Miscellanea Sacra*, and other valuable books of the scriptures, and who was honoured with the friendship of Mr. Locke, though then very young.

I.

And must the man of wondrous mind
(Now his rich thoughts are just refin'd)
Forsake our longing eyes?
Reason at length submits to wear
The wings of faith; and lo! they rear
Her chariot high, and nobly bear
Her prophet to the skies.

II.

Go, friend, and wait the prophet's flight;
Watch if his mantle chance to light,
And seize it for thy own.
SHUTE is the darling of his years;
Young SHUTE his better likeness bears:
All but his wrinkles and his hairs
Are copy'd in his son.

III.

Thus when our follies or our faults
Call for the pity of thy thoughts,
Thy pen shall make us wise.
The follies of whose youthful wit *
Could pierce the British fogs with light;
Place our true "interest" in our sight,
And open half our eyes.

* Alluding to a treatise of Mr. Shute's.

In 1704, our author's strength began to fail him more than ever in the beginning of the summer; a season which, for many years, had restored him some degrees of strength. His weakness made him apprehend his death was near. He often spoke of it himself, but always with great composure, though he omitted none of the precautions which his skill in medicine could suggest, in order to prolong his life. At length his legs began to swell, and that swelling increasing every day, his strength diminished very visibly. He then saw how short a time he had to live, and prepared to quit this world with a deep sense of the manifold blessings of God to him, which he took delight in recounting to his friends, and full of a sincere resignation to the divine will, and in firm hopes of his promises of a future life. Some weeks before his death, as he was no longer able to walk, he was carried about the house in a chair. And the Lady Masham going to see him, October 27th, instead of finding him in his study, where he used to be, she found him in his bed. As she showed some surprise at this, Mr. Locke told her that he had resolved to continue in bed, since he was so much fatigued by rising the day before, that he could not support it; and therefore did not know whether he should ever rise again. He could not eat any dinner that day; and after dinner, those who kept him company proposed to read to him something that might amuse him; but he refused it. However, a person having brought some papers into his chamber, he desired to know what they were; upon which they were read to him, and then he said, "that what he had to do was now done, and he thanked God for it." Upon this they went to his bedside, and he added, that he desired to be remembered by them in their prayers that evening. He was told, that if he would, the whole family should be called to prayer in his chamber, to which he consented. He was asked, Whether he thought himself near his death? to which he answered, "That it might perhaps happen that night, but could not be delayed above three or four days." He then fell into

a cold sweat, but recovered himself soon after. He was offered a little Brunswick mum, which he had drank with pleasure the week before. He took some spoonfuls of it, and drank to the health of the company, saying, "I wish you all happiness when I shall be departed." Those who were in the chamber having left it, except the Lady Masham, who sat by his bed, he exhorted her "to regard this world only as a state of preparation for a better." He added, "that he had lived long enough, and thanked God for having passed his life happily; but that this life appeared to him a mere vanity." After supper the family went up into his chamber to prayer, and between eleven and twelve at night he seemed a little better. Lady Masham having desired to sit up with him, he would not permit her, and said, that perhaps he might sleep; but that if he found any change, he would have her called. He did not sleep, but resolved to try to rise next morning, which he did. He was carried into his study, and placed in an easy chair, where he slept a considerable while at different times. Seeming to be a little refreshed, he would be dressed as he used to be, and called for some small beer, which he tasted very seldom; and then desired the Lady Masham, who was reading some psalms low while he was dressing, to read aloud. She did so, and he appeared very attentive, till the approach of death prevented him. He then desired her to break off, and a few minutes after expired, on October the 28th 1704, in the 73d year of his age.

Thus died this great and most excellent philosopher, who, after he had bestowed many years in matters of science and speculation, happily turned his thoughts to the study of the scriptures, which he carefully examined with the same liberty he had used in his study of the other sciences: and it is needless to say, how much the Christian world is indebted to him for his paraphrase and comments on some of the epistles which were published after his death.

There is no occasion to attempt a panegyric on our author. His writings are now well known and valued, and will last as long as the English language. He had a great knowledge of the world, and of the business of it. He was prudent without cunning, and he engaged men's esteem by his probity, and took care to secure himself from the attacks of false friends and sordid flatterers. Averse to all mean complaisance, his wisdom, his experience, his gentle manners, gained him the respect of his inferiors, the esteem of his equals, the friendship and confidence of those of the highest quality. If there was any thing he could not bear, it was ill manners: this was ever ungrateful to him, unless when he perceived that it proceeded from ignorance; but when it was the effect of pride or ill-nature, or brutality, he detested it. He looked on civility not only as a duty of humanity, but of Christianity; and he thought that it ought to be more pressed and urged upon men than it commonly is. He recommended on this occasion a treatise in the Moral Essays, written by the gentlemen of the Port Royal, "concerning the means of preserving peace among men *," and was a great admirer of Dr. Wichcote's sermons on moral subjects. He was very exact to his word, and religiously performed whatever he promised. He was very scrupulous of giving recommendations of persons, whom he did not well know, and would by no means commend those whom he thought not to deserve it. If he was told that his recommendations had not produced the effect expected, he would say, "the reason of that was, because he had never deceived any person by saying more than he knew; that he never passed his word for any, but such as he believed would answer the character he gave of them; and that if he should do otherwise, his recommendations would be worth nothing." Though he chiefly loved truths that were useful, and with such fed his mind, and was generally very well pleased to make them the subject of conversation; yet he used to say, that, in order to employ one

* The select sermons which were published, with a preface, by Lord Shaftesbury.

part of this life in services and important occupations, it was necessary to spend another in mere amusements; and when an occasion naturally offered, he gave himself up with pleasure to the charms of a free and facetious conversation. He remembered a great many agreeable stories, which he always brought in properly, and generally made them yet more delightful, by his natural and agreeable manner of telling them.

He had a peculiar art in conversation to lead people to talk of what they understood best. With a gardener he discoursed of gardening; with a jeweller of a diamond, &c.; with a chemist of chemistry. "By this," said he, "I please all those men who commonly can speak pertinently upon nothing else. As they believe I have an esteem for their profession, they are charmed with showing their abilities before me; and I in the meanwhile improve myself by their discourse." And indeed, he had by this means acquired a very good insight into all the arts, of which he daily learned more and more. He used to say, too, that the knowledge of the arts contained more true philosophy than all those fine learned hypotheses, which having no relation to the nature of things, are fit only to make men lose their time in inventing or comprehending them. By the several questions which he would put to artificers, he would find out the secret of their art, which they did not understand themselves; and often give them views entirely new, which sometimes they put in practice to their profit. He was so far from assuming those airs of gravity, by which some persons, learned and unlearned, love to distinguish themselves from the rest of the world, that, on the contrary, he looked on them as an infallible mark of impertinence. Nay, sometimes he would divert himself with imitating that studied gravity, in order to turn it the better into ridicule; and upon this occasion he always remembered this maxim of the Duke of La Rouchefoucault, which he admired above all others, "that gravity is a mystery of the body, invented to conceal the defects of the mind." One thing, which those who lived

for any time with Mr. Locke, could not help observing of him was, that he used his reason in every thing he did, and that nothing that was useful seemed unworthy of his care. He often used to say, that there was an art in every thing, and it was easy for any one to see it, from the manner in which he went about the most trifling things. As he always kept the useful in his eye in all his disquisitions, he esteemed the employments of men only in proportion to the good they were capable of producing. For which reason he had no great value for those critics and mere grammarians who waste their lives in comparing words and phrases, and in coming to a determination in the choice of a various reading, in a passage of no importance. He valued yet less those professed disputants, who being wholly possessed with a desire of coming off with victory, fortify themselves behind the ambiguity of a word, to give their adversaries the more trouble. And whenever he had to do with this sort of people, if he did not beforehand strongly resolve to keep his temper, he soon fell into passion. For his natural temper was hot and choleric; but his anger never lasted long. If he retained any resentment, it was against himself for having given way to so ridiculous a passion; which, as he used to say, may do a great deal of harm, but never yet did the least good. He often would blame himself for his weakness. He disliked those authors who labour only to destroy, without establishing any thing themselves. "A building," said he, "displeases them. They find great fault in it; let them demolish it, and welcome, if they will, but endeavour to raise another in its place." He advised, that whenever we have meditated any thing new, we should throw it as soon as possible upon paper, in order to be the better able to judge of it by seeing it altogether, because the mind of man is not capable of retaining clearly a long chain of consequences, and of seeing without confusion the relation of a great number of different ideas. Besides, it often happens, that what we had most admired, when considered in the gross, and in a perplexed manner, appears to be ut-

terly inconsistent and insupportable, when we see every part of it distinctly.

He was naturally very active, and employed himself as much as his health would permit. Sometimes he diverted himself with working in the garden, which he very well understood. He loved walking, but not being able to walk much, through the disorder of his lungs, he used to ride out after dinner, and when he could not bear a horse he went in a chaise. He always chose to have company with him, though it were but a child; for he took pleasure in talking with children of a good education. His bad health was a disturbance to none but himself; and any person might be with him, without any other concern than that of seeing him suffer. He did not differ from others in his diet, but only in that his usual drink was nothing but water; and he thought that was the means under God of lengthening out his life. To this he also thought, the preservation of his sight was in a great measure owing; for he could read by candlelight all sorts of books to the last, if they were not of a very small print, without the use of spectacles. He had no other distemper but his asthma, except a deafness for about six months, which he lamented in a letter to one of his friends, telling him, "he thought it better to be blind than deaf, as it deprived him of all conversation." He left several manuscripts behind him, besides his paraphrase on some of St. Paul's epistles, which were published at different times, and are all now added to the collection of his works by M. Desmaizeaux, from whence this account of his life, and this edition of his *Essay concerning Human Understanding*, and his *Thoughts on the the Conduct of the Understanding* are taken.

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OF HUMAN UNDERSTANDING.

BOOK I.—CHAPTER I.

INTRODUCTION.

§ 1. *An Inquiry into the Understanding, pleasant and useful.*

SINCE it is the *understanding* that sets man above the rest of sensible beings, and gives him all the advantage and dominion which he has over them, it is certainly a subject, even for its nobleness, worth our labour to inquire into. The understanding, like the eye, whilst it makes us see and perceive all other things, takes no notice of itself: And it requires art and pains to set it at a distance, and make it its own object. But whatever be the difficulties that lie in the way of this inquiry, whatever it be that keeps us so much in the dark to ourselves, sure I am, that all the light we can let in upon our own minds, all the acquaintance we can make with our own understandings, will not only be very pleasant, but bring us great advantage, in directing our thoughts in the search of other things.

§ 2. *Design.*

THIS, therefore, being my *purpose* to inquire into the original, certainty, and extent of human knowledge, together with the grounds and degrees of belief, opinion, and assent, I shall not at present meddle with the physical consideration of the mind, or trouble myself to examine, wherein its essence consists, or by what motions of our spirits, or alterations of our bodies, we come to have any sensation by our organs, or any *ideas* in our understandings; and whether those ideas do, in their formation, any or all of them, depend on matter

or no. These are speculations which, however curious and entertaining, I shall decline, as lying out of my way, in the design I am now upon. It shall suffice to my present purpose, to consider the discerning faculties of a man, as they are employed about the objects which they have to do with: And I shall imagine I have not wholly misemployed myself in the thoughts I shall have on this occasion, if, in this historical plain method, I can give any account of the ways whereby our understandings come to attain those notions of things we have, and can set down any measures of the certainty of our knowledge, or the grounds of those persuasions which are to be found amongst men, so various, different, and wholly contradictory; and yet asserted somewhere or other with such assurance and confidence, that he that shall take a view of the opinions of mankind, observe their opposition, and at the same time consider the fondness and devotion wherewith they are embraced, the resolution and eagerness wherewith they are maintained, may perhaps have reason to suspect, that either there is no such thing as truth at all, or that mankind hath no sufficient means to attain a certain knowledge of it.

§ 3. *Method.*

It is therefore worth while to search out the *bounds* between opinion and knowledge; and examine by what measures, in things whereof we have no certain knowledge, we ought to regulate our assent, and moderate our persuasions. In order whereunto, I shall pursue this following method.

First, I shall inquire into the *original* of those *ideas*, notions, or whatever else you please to call them, which a man observes, and is conscious to himself he has in his mind; and the ways whereby the understanding comes to be furnished with them.

Secondly, I shall endeavour to show, what *knowledge* the understanding hath by those ideas; and the certainty, evidence, and extent of it.

Thirdly, I shall make some inquiry into the nature and grounds of *faith* or *opinion*; whereby I mean that assent which we give to any proposition as true, of whose

truth yet we have no certain knowledge : And here we shall have occasion to examine the reasons and degrees of *assent*.

§ 4. *Useful to know the Extent of our Comprehension.*

IF by this inquiry into the nature of the understanding, I can discover the powers thereof, how far they reach, to what things they are in any degree proportionate, and where they fail us, I suppose it may be of use to prevail with the busy mind of man, to be more cautious in meddling with things exceeding its comprehension ; to stop, when it is at the utmost extent of its tether ; and to sit down in a quiet ignorance of those things, which, upon examination, are found to be beyond the reach of our capacities. We should not then perhaps be so forward, out of affectation of an universal knowledge, to raise questions, and perplex ourselves and others with disputes about things to which our understandings are not suited, and of which we cannot frame in our minds any clear or distinct perceptions, or whereof (as it has perhaps too often happened) we have not any notions at all. If we can find out, how far the understanding can extend its view ; how far it has faculties to attain certainty ; and in what cases it can only judge and guess, we may learn to content ourselves with what is attainable by us in this state.

§ 5. *Our Capacity suited to our State and Concerns.*

FOR though the *comprehension* of our understandings comes exceeding short of the vast extent of things ; yet we shall have cause enough to magnify the bountiful Author of our being, for that portion and degree of knowledge he has bestowed on us, so far above all the rest of the inhabitants of this our mansion. Men have reason to be well satisfied with what God hath thought fit for them, since he has given them (as St. Peter says) πάντα πρὸς ζωὴν καὶ εὐσέβειαν, whatsoever is necessary for the conveniencies of life, and information of virtue ; and has put within the reach of their discovery, the comfortable provision for this life, and the way that leads to a better. How short soever their knowledge may come of an universal or perfect comprehension of whatsoever

is; it yet secures their great concernments, that they have light enough to lead them to the knowledge of their Maker, and the sight of their own duties. Men may find matter sufficient to busy their heads, and employ their hands, with variety, delight, and satisfaction; if they will not boldly quarrel with their own constitution, and throw away the blessings their hands are filled with, because they are not big enough to grasp every thing. We shall not have much reason to complain of the narrowness of our minds, if we will but employ them about what may be of use to us; for of that they are very capable: And it will be an unpardonable, as well as childish peevishness, if we undervalue the advantages of our knowledge, and neglect to improve it to the ends for which it was given us, because there are some things that are set out of the reach of it. It will be no excuse to an idle and untoward servant, who would not attend his business by candle-light, to plead that he had not broad sun-shine. The candle that is set up in us shines bright enough for all our purposes. The discoveries we can make with this ought to satisfy us; and we shall then use our understandings right, when we entertain all objects in that way and proportion that they are suited to our faculties; and upon those grounds they are capable of being proposed to us; and not peremptorily, or intemperately, require demonstration, and demand certainty, where probability only is to be had, and which is sufficient to govern all our concernments. If we will disbelieve every thing, because we cannot certainly know all things; we shall do much-what as wisely as he who would not use his legs, but sit still and perish, because he had no wings to fly.

§ 6. *Knowledge of our Capacity, a Cure of Scepticism and Idleness.*

WHEN we know our own *strength*, we shall the better know what to undertake with hopes of success: And when we have well surveyed the *powers* of our own minds, and made some estimate what we may expect from them, we shall not be inclined either to sit still, and not set our thoughts on work at all in despair of

knowing any thing; or, on the other side, question every thing, and disclaim all knowledge, because some things are not to be understood. It is of great use to the sailor, to know the length of his line, though he cannot with it fathom all the depths of the ocean. It is well he knows that it is long enough to reach the bottom at such places as are necessary to direct his voyage, and caution him against running upon shoals that may ruin him. Our business here is not to know all things, but those which concern our conduct. If we can find out those measures, whereby a rational creature, put in that state which man is in this world, may and ought to govern his opinions, and actions depending thereon, we need not be troubled that some other things escape our knowledge.

§ 7. *Occasion of this Essay.*

THIS was that which gave the first rise to this *Essay* concerning the *Understanding*. For I thought that the first step towards satisfying several inquiries the mind of man was very apt to run into, was, to take a survey of our own understandings, examine our own powers, and see to what things they were adapted. Till that was done, I suspected we began at the wrong end, and in vain sought for satisfaction in a quiet and sure possession of truths that most concerned us, whilst we let loose our thoughts into the vast ocean of *being*; as if all that boundless extent were the natural and undoubted possession of our understandings, wherein there was nothing exempt from its decisions, or that escaped its comprehension. Thus men, extending their inquiries beyond their capacities, and letting their thoughts wander into those depths where they can find no sure footing, it is no wonder that they raise questions, and multiply disputes, which, never coming to any clear resolution, are proper only to continue and increase their doubts, and to confirm them at last in perfect scepticism. Whereas, were the capacities of our understandings well considered, the extent of our knowledge once discovered, and the horizon found, which sets the bounds between the enlightened and dark parts of things, be-

tween what is, and what is not, comprehensible by us; men would perhaps, with less scruple, acquiesce in the avowed ignorance of the one, and employ their thoughts and discourse with more advantage and satisfaction in the other.

§ 8. *What Idea stands for.*

THUS much I thought necessary to say concerning the occasion of this inquiry into human understanding; but before I proceed on to what I have thought on this subject, I must here, in the entrance, beg pardon of my reader for the frequent use of the word *idea*, which he will find in the following treatise. It being that term which, I think, serves best to stand for whatsoever is the object of the understanding when a man thinks, I have used it to express whatever is meant by *phantasm*, *notion*, *species*, or whatever it is which the mind can be employed about in thinking; and I could not avoid frequently using it.

I presume it will be easily granted me, that there are such *ideas* in men's minds; every one is conscious of them in himself; and men's words and actions will satisfy him, that they are in others.

Our first inquiry then shall be, how they come into the mind.

CHAP. II.

NO INNATE PRINCIPLES IN THE MIND.

§ 1. *The way shewn how we come by any Knowledge, sufficient to prove it not Innate.*

IT is an established opinion amongst some men, that there are in the *understanding* certain *innate principles*, some primary notions, *Κοινὰ ἔννοιαι*, characters as it were stamped upon the mind of man, which the soul receives in its very first being, and brings into the world with it. It would be sufficient to convince unprejudiced readers of the falseness of this supposition, if I should only show (as I hope I shall in the following parts of this discourse), how men, barely by the use of

their natural faculties, may attain to all the knowledge they have, without the help of any innate impressions; and may arrive at certainty, without any such original notions or principles. For I imagine any one will easily grant, that it would be impertinent to suppose the *ideas* of colours innate in a creature, to whom God hath given sight, and a power to receive them by the eyes, from external objects: And no less unreasonable would it be to attribute several truths to the impressions of nature and innate characters, when we may observe in ourselves faculties fit to attain as easy and certain knowledge of them, as if they were originally imprinted on the mind.

But because a man is not permitted, without censure, to follow his own thoughts in the search of truth, when they lead him ever so little out of the common road, I shall set down the reasons that made me doubt of the truth of that opinion, as an excuse for my mistake, if I be in one; which I leave to be considered by those who, with me, dispose themselves to embrace truth wherever they find it.

§ 2. *General Assent, the great Argument.*

THERE is nothing more commonly taken for granted, than that there are certain principles, both *speculative* and *practical* (for they speak of both), universally agreed upon by all mankind, which therefore, they argue, must needs be constant impressions, which the souls of men receive in their first beings, and which they bring into the world with them, as necessarily and really as they do any of their inherent faculties.

§ 3. *Universal Consent proves nothing Innate.*

THIS argument, drawn from *universal consent*, has this misfortune in it, that if it were true in matter of fact, that there were certain truths wherein all mankind agreed, it would not prove them innate, if there can be any other way shown, how men may come to that universal agreement in the things they do consent in; which I presume may be done.

§ 4. What is, is ; and, it is impossible for the same thing to be, and not to be, *not universally assented to.*

BUT, which is worse, this argument of universal consent, which is made use of to prove innate principles, seems to me a demonstration, that there are none such ; because there are none to which all mankind give an universal assent. I shall begin with the Speculative, and instance in those magnified principles of demonstration : *Whatsoever is, is ; and, it is impossible for the same thing to be, and not to be ;* which, of all others, I think, have the most allowed title to innate. These have so settled a reputation of maxims universally received, that it will, no doubt, be thought strange, if any one should seem to question it. But yet I take liberty to say, that these propositions are so far from having an universal assent, that there are a great part of mankind to whom they are not so much as known.

§. 5. *Not on the mind naturally imprinted, because not known to Children, Idiots, &c.*

FOR, first, it is evident, that all *children* and *idiots* have not the least apprehension or thought of them ; and the want of that is enough to destroy that universal assent which must needs be the necessary concomitant of all innate truths : It seeming to me near a contradiction to say, that there are truths imprinted on the soul, which it perceives or understands not ; imprinting, if it signify any thing, being nothing else but the making certain truths to be perceived. For to imprint any thing on the mind, without the mind's perceiving it, seems to me hardly intelligible. If, therefore, *children* and *idiots* have souls, have minds, with those impressions upon them, they must unavoidably perceive them, and necessarily know and assent to these truths ; which since they do not, it is evident that there are no such impressions. For if they are not notions naturally imprinted, how can they be innate ? And if they are notions imprinted, how can they be unknown ? To say a notion is imprinted on the mind, and yet at the same time to say, that the mind is ignorant of it, and never yet took notice of it, is to make

this impression nothing. No proposition can be said to be in the mind, which it never yet knew, which it was never yet conscious of. For if any one may, then, by the same reason, all propositions that are true, and the mind is capable of ever assenting to, may be said to be in the mind, and to be imprinted: Since, if any one can be said to be in the mind, which it never yet knew, it must be only because it is capable of knowing it; and so the mind is of all truths it ever shall know. Nay, thus truths may be imprinted on the mind, which it never did, nor ever shall know: For a man may live long, and die at last in ignorance of many truths which his mind was capable of knowing, and that with certainty. So that, if the capacity of knowing be the natural impression contended for, all the truths a man ever comes to know will, by this account, be every one of them innate: and this great point will amount to no more but only to a very improper way of speaking; which, whilst it pretends to assert the contrary, says nothing different from those who deny innate principles. For nobody, I think, ever denied that the mind was capable of knowing several truths. The capacity, they say, is innate, the knowledge acquired. But then to what end such contest for certain innate maxims? If truths can be imprinted on the understanding without being perceived, I can see no difference there can be between any truths the mind is capable of knowing, in respect of their original: They must all be innate, or all adventitious: In vain shall a man go about to distinguish them. He therefore that talks of innate notions in the understanding, cannot (if he intend thereby any distinct sort of truths) mean such truths to be in the understanding, as it never perceived, and is yet wholly ignorant of. For if these words (*to be in the understanding*) have any propriety, they signify to be understood. So that, to be in the understanding, and not to be understood; to be in the mind, and never to be perceived, is all one as to say, any thing is, and is not, in the mind or understanding. If, therefore, these two propositions, *Whatsoever is, is*; and, *it is impossible for*

the same thing to be, and not to be, are by nature imprinted, children cannot be ignorant of them; infants, and all that have souls, must necessarily have them in their understandings, know the truth of them, and assent to it.

§ 6.

To avoid this, it is usually answered, that all men know and assent to them, *when they come to the use of reason*; and this is enough to prove them innate. I answer,

§ 7. *That Men know them when they come to the use of Reason, answered.*

DOUBTFUL expressions, that have scarce any signification, go for clear reasons, to those who, being prepossessed, take not the pains to examine even what they themselves say. For to apply this answer with any tolerable sense to our present purpose, it must signify one of these two things: Either that as soon as men come to the use of reason, these supposed native inscriptions come to be known, and observed by them; or else that the use and exercise of men's reasons assists them in the discovery of these principles, and certainly makes them known to them.

§ 8. *If Reason discovered them, that would not prove them Innate.*

If they mean, that by the *use of reason* men may discover these principles; and that this is sufficient to prove them innate; their way of arguing will stand thus, viz. That whatever truths reason can certainly discover to us, and make us firmly assent to, those are all naturally imprinted on the mind; since that universal assent, which is made the mark of them, amounts to no more but this, That by the use of reason we are capable to come to a certain knowledge of, and assent to them; and by this means there will be no difference between the maxims of the mathematicians, and theorems they deduce from them. All must be equally allowed innate, they being all discoveries made by the use of reason, and truths that a rational creature may certainly come to know, if he apply his thoughts rightly that way.

§ 9. *It is false that Reason discovers them.*

BUT how can these men think the *use of reason* necessary to discover principles that are supposed innate, when reason (if we may believe them) is nothing else but the faculty of deducing unknown truths from principles or propositions that are already known? That certainly can never be thought innate, which we have need of reason to discover, unless, as I have said, we will have all the certain truths that reason ever teaches us, to be innate. We may as well think the use of reason necessary to make our eyes discover visible objects, as that there should be need of reason, or the exercise thereof, to make the understanding see what is originally engraven in it, and cannot be in the understanding, before it be perceived by it. So that to make reason discover those truths thus imprinted, is to say, that the use of reason discovers to a man what he knew before; and if men have those innate impressed truths originally, and before the use of reason, and yet are always ignorant of them till they come to the use of reason, it is in effect to say, that men know, and know them not, at the same time.

§ 10.

It will here perhaps be said, that mathematical demonstrations, and other truths that are not innate, are not assented to, as soon as proposed, wherein they are distinguished from these maxims, and other innate truths. I shall have occasion to speak of assent upon the first proposing, more particularly by and by. I shall here only, and that very readily, allow that these maxims and mathematical demonstrations are in this different, that the one has need of reason, using of proofs, to make them out, and to gain our assent; but the other, as soon as understood, are, without any the least reasoning, embraced and assented to. But I withal beg leave to observe, that it lays open the weakness of this subterfuge, which requires the *use of reason* for the discovery of these general truths; since it must be confessed, that in their discovery there is no use made of reasoning at all. And I think those who give this answer will

not be forward to affirm, that the knowledge of this maxim, *That it is impossible for the same thing to be, and not to be*, is a deduction of our reason. For this would be to destroy that bounty of Nature they seem so fond of, whilst they make the knowledge of those principles to depend on the labour of our thoughts. For all reasoning is search, and casting about, and requires pains and application. And how can it with any tolerable sense be supposed, that what was imprinted by Nature, as the foundation and guide of our reason, should need the use of reason to discover it?

§ 11.

THOSE who will take the pains to reflect with a little attention on the operations of the understanding, will find that this ready assent of the mind to some truths, depends not, either on native inscription, or the *use of reason*; but on a faculty of the mind quite distinct from both of them, as we shall see hereafter. Reason, therefore, having nothing to do in procuring our assent to these maxims, if by saying, that *men know and assent to them, when they come to the use of reason*, be meant, that the use of reason assists us in the knowledge of these maxims, it is utterly false; and were it true, would prove them not to be innate.

§ 12. *The coming to the Use of Reason, not the Time we come to know these Maxims.*

Is by knowing and assenting to them, *when we come to the use of reason*, be meant, that this is the time when they come to be taken notice of by the mind; and that as soon as children come to the use of reason, they come also to know and assent to these maxims: this also is false and frivolous. *First*, It is false, because it is evident these maxims are not in the mind so early as the use of reason; and therefore the coming to the use of reason is falsely assigned, as the time of their discovery. How many instances of the use of reason may we observe in children, long time before they have any knowledge of this maxim, *That it is impossible for the same thing to be, and not to be*? And a great part of illiterate people, and savages, pass many years, even of their ra-

tional age, without ever thinking on this, and the like general propositions. I grant, men come not to the knowledge of these general and more abstract truths, which are thought innate, till they come to the use of reason; and I add, nor then neither: Which is so, because, till after they come to the use of reason, those general abstract *ideas* are not framed in the mind, about which those general maxims are, which are mistaken for innate principles; but are indeed discoveries made, and verities introduced, and brought into the mind by the same way, and discovered by the same steps, as several other propositions, which nobody was ever so extravagant as to suppose innate. This I hope to make plain in the sequel of this discourse. I allow, therefore, a necessity, that men should come to the use of reason, before they get the knowledge of those general truths; but deny that men's coming to the use of reason is the time of their discovery.

§ 13. *By this they are not distinguished from other knowable Truths.*

IN the mean time it is observable, that this saying, that men know, and assent to these maxims, *when they come to the use of reason*, amounts, in reality of fact, to no more but this, That they are never known, nor taken notice of, before the use of reason, but may possibly be assented to some time after, during a man's life; but when, is uncertain: and so may all other knowable truths, as well as these which therefore have no advantage, nor distinction from others, by this note of being known when we come to the use of reason; nor are thereby proved to be innate, but quite the contrary.

§ 14. *If coming to the Use of Reason were the Time of their Discovery, it would not prove them Innate.*

BUT, Secondly, Were it true that the precise time of their being known, and assented to, were, when men come to the *use of reason*, neither would that prove them innate. This way of arguing is so frivolous, as the supposition of itself is false. For by what kind of logic will it appear, that any notion is originally by Nature imprinted in the mind in its first constitution, because

it comes first to be observed, and assented to: when a faculty of the mind, which has quite a distinct province, begins to exert itself? And therefore, the coming to the use of speech, if it were supposed the time that these maxims are first assented to (which it may be with as much truth, as the time when men come to the use of reason), would be as good a proof that they were innate, as to say, they are innate because men assent to them, when they come to the use of reason. I agree then with these men of innate principles, that there is no knowledge of these general and self-evident maxims in the mind, till it comes to the exercise of reason: But I deny that the coming to the use of reason is the precise time when they are first taken notice of; and if that were the precise time, I deny that it would prove them innate. All that can with any truth be meant by this proposition, That men *assent to them when they come to the use of reason*, is no more but this, That the making of general abstract *ideas*, and the understanding of general names, being a concomitant of the rational faculty, and growing up with it, children commonly get not those general *ideas*, nor learn the names that stand for them, till having for a good while exercised their reason about familiar and more particular *ideas*, they are, by their ordinary discourse and actions with others, acknowledged to be capable of rational conversation. If assenting to these maxims, when men come to the use of reason, can be true in any other sense, I desire it may be shown; or, at least, how in this, or any other sense, it proves them innate.

§. 15. *The Steps by which the Mind attains several Truths.*

THE senses at first let in particular *ideas* and furnish the yet empty cabinet: And the mind by degrees growing familiar with some of them, they are lodged in the memory, and names got to them. Afterwards the mind proceeding farther, abstracts them, and by degrees learns the use of general names. In this manner the mind comes to be furnished with *ideas* and language, the materials about which to exercise its discursive fa-

culty; and the use of reason becomes daily more visible, as these materials that give it employment increase. But though the having of general *ideas*, and the use of general words and reason usually grow together; yet I see not how this any way proves them innate. The knowledge of some truths, I confess, is very early in the mind, but in a way that shows them not to be innate. For, if we will observe, we shall find it still to be about *ideas*, not innate, but acquired; it being about those first, which are imprinted by external things, with which infants have earliest to do, which make the most frequent impressions on their senses. In *ideas* thus got, the mind discovers, that some agree, and others differ, probably as soon as it has any use of memory; as soon as it is able to retain and receive distinct *ideas*. But whether it be then or no, this is certain it does so, long before it has the use of words, or comes to that which we commonly call the *use of reason*. For a child knows as certainly, before it can speak, the difference between the *ideas* of sweet and bitter (*i. e.* that sweet is not bitter), as it knows afterwards (when it comes to speak) that wormwood and sugar-plumbs are not the same thing.

§ 16.

A CHILD knows not that three and four are equal to seven, till he comes to be able to count to seven, and has got the name and *idea* of equality; and then, upon explaining those words, he presently assents to, or rather perceives the truth of, that proposition. But neither does he then readily assent, because it is an innate truth; nor was his assent wanting till then, because he wanted the *use of reason*; but the truth of it appears to him, as soon as he has settled in his mind the clear and distinct *ideas* that these names stand for; and then he knows the truth of that proposition, upon the same grounds, and by the same means, that he knew before, that a rod and cherry are not the same thing; and upon the same grounds also, that he may come to know afterwards, *That it is impossible for the same thing to be, and not to be*; as shall be more fully shown hereafter.

So that the later it is before any one comes to have those general *ideas* about which those maxims are; or to know the signification of those general terms that stand for them; or to put together in his mind the *ideas* they stand for: the later also will it be before he comes to assent to those maxims, whose terms, with the *ideas* they stand for, being no more innate than those of a cat or a weasel, he must stay till time and observation have acquainted him with them; and then he will be in a capacity to know the truth of these maxims upon the first occasion that shall make him put together those *ideas* in his mind, and observe whether they agree or disagree, according as is expressed in those propositions. And therefore it is, that a man knows that eighteen and nineteen are equal to thirty-seven, by the same self-evidence that he knows one and two to be equal to three: Yet a child knows this not so soon as the other, not for want of the use of reason, but because the *ideas* the words eighteen, nineteen, and thirty-seven stand for, are not so soon got, as those which are signified by one, two, and three.

§ 17. *Assenting, as soon as proposed and understood, proves them not Innate.*

THIS evasion therefore of general assent, when men come to the use of reason, falling as it does, and leaving no difference between those supposed innate and other truths that are afterwards acquired and learned; men have endeavoured to secure an universal assent to those they call maxims, by saying, they are generally *assented to as soon as proposed*, and the terms they are proposed in, understood: Seeing all men, even children, as soon as they hear and understand the terms, assent to these propositions, they think it is sufficient to prove them innate. For since men never fail, after they have once understood the words, to acknowledge them for undoubted truths, they would infer, that certainly these propositions were first lodged in the understanding; which, without any teaching, the mind at the very first proposal immediately closes with, and assents to, and after that never doubts again.

§ 18. *If such an Assent be a Mark of Innate, then that One and Two are equal to Three; that Sweetness is not Bitterness; and a thousand the like, must be Innate.*

IN answer to this, I demand whether ready assent given to a proposition *upon first hearing*, and understanding the terms, be a certain mark of an innate principle? If it be not, such a general assent is in vain urged as a proof of them. If it be said that it is a mark of innate, they must then allow all such propositions to be innate, which are generally assented to as soon as heard, whereby they will find themselves plentifully stored with innate principles. For upon the same ground, viz. of assent, at first hearing and understanding the terms, that men would have those maxims pass for innate, they must also admit several propositions about numbers, to be innate: And thus, *that one and two are equal to three; that two and two are equal to four;* and a multitude of other the like propositions in numbers, that every body assents to at first hearing, and understanding the terms, must have a place amongst these innate axioms. Nor is this the prerogative of numbers alone, and propositions made about several of them; but even natural philosophy, and all the other sciences afford propositions, which are sure to meet with assent as soon as they are understood. *That two bodies cannot be in the same place*, is a truth that nobody any more sticks at, than at this maxim, *That it is impossible for the same thing to be, and not to be; that white is not black; that a square is not a circle; that yellowness is not sweetness.* These, and a million of other such propositions, as many at least as we have distinct ideas of, every man in his wits, at first hearing, and knowing what the names stand for, must necessarily assent to. If these men will be true to their own rule, and have assent at first hearing and understanding the terms, to be a mark of innate, they must allow not only as many innate propositions as men have distinct ideas; but as many as men can make propositions wherein different ideas are denied one of another,

Since every proposition, where one different *idea* is denied of another, will as certainly find assent at first hearing and understanding the terms, as this general one, *It is impossible for the same thing to be, and not to be*; or that which is the foundation of it, and is the easier understood of the two, *the same is not different*. By which account they will have legions of innate propositions of this one sort, without mentioning any other. But since no proposition can be innate, unless the *ideas*, about which it is, be innate; this will be to suppose all our *ideas* of colours, sounds, tastes, figure, &c. innate; than which there cannot be any thing more opposite to reason and experience. Universal and ready assent upon hearing and understanding the terms, is (I grant) a mark of self-evidence; but self-evidence depending not on innate impressions, but on something else (as we shall show hereafter), belongs to several propositions, which nobody was yet so extravagant as to pretend to be innate.

§ 19. *Such less general Propositions known before these universal Maxims.*

NOR let it be said, that those more particular self-evident propositions, which are assented to at first hearing, as *that one and two are equal to three*; *that green is not red*, &c. are received as the consequences of those more universal propositions, which are looked on as innate principles: since any one who will but take the pains to observe what passes in the understanding, will certainly find that these, and the like less general propositions, are certainly known, and firmly assented to, by those who are utterly ignorant of those more general maxims; and so, being earlier in the mind than those (as they are called) first principles, cannot owe to them the assent, wherewith they are received at first hearing.

§ 20. *One and One equal to Two, &c. not general nor useful, answered.*

IF it be said that these propositions, viz. *two and two are equal to four*; *red is not blue*, &c. are not general maxims, nor of any great use: I answer, That makes nothing to the argument of universal assent, upon hear-

ing and understanding. For if that be the certain mark of innate, whatever proposition can be found, that receives general assent as soon as heard and understood, that must be admitted for an innate proposition, as well as this maxim, *That it is impossible for the same thing to be, and not to be*; they being upon this ground equal. And as to the difference of being more general, that makes this maxim more remote from being innate; those general and abstract *ideas* being more strangers to our first apprehensions than those of more particular self-evident propositions; and therefore it is longer before they are admitted and assented to by the growing understanding. And as to the usefulness of these magnified maxims, that perhaps will not be found so great as is generally conceived, when it comes to its due place to be more fully considered.

§ 21. *These Maxims not being known sometimes till proposed, proves them not Innate.*

But we have not yet done with *assenting to propositions at first hearing and understanding their terms*; it is fit we first take notice, that this, instead of being a mark that they are innate, is a proof of the contrary: Since it supposes, that several who understand and know other things, are ignorant of these principles till they are proposed to them; and that one may be unacquainted with these truths till he hears them from others. For if they were innate, what need they be proposed in order to gaining assent; when, by being in the understanding, by a natural and original impression (if there were any such) they could not but be known before? Or doth the proposing them, print them clearer in the mind than nature did? If so, then the consequence will be, That a man knows them better after he has been thus taught them, than he did before. Whence it will follow, that these principles may be made more evident to us by others teaching, than nature has made them by impression; which will ill agree with the opinion of innate principles, and give but little authority to them; but, on the contrary, makes them unfit to be the foundations of all our other knowledge, as they are pre-

tended to be. This cannot be denied, that men grow first acquainted with many of these self-evident truths, upon their being proposed: But it is clear, that whosoever does so, finds in himself, that he then begins to know a proposition, which he knew not before, and which from thenceforth he never questions; not because it was innate, but because the consideration of the nature of the things contained in those words, would not suffer him to think otherwise; how, or whensoever he is brought to reflect on them. And if whatever is assented to at first hearing and understanding the terms, must pass for an innate principle, every well-grounded observation drawn from particulars into a general rule, must be innate. When yet it is certain, that not all, but only sagacious heads, light at first on these observations, and reduce them into general propositions; not innate, but collected from a preceding acquaintance and reflection on particular instances. These, when observing men have made them; unobserving men, when they are proposed to them, cannot refuse their assent to.

§ 22. *Implicitly known before proposing, signifies that the Mind is capable of understanding them, or else signifies nothing.*

If it be said, the understanding hath an *implicit knowledge* of these principles, but not an explicit, before this first hearing (as they must, who will say, that they are in the understanding before they are known), it will be hard to conceive what is meant by a principle imprinted on the understanding implicitly, unless it be this, that the mind is capable of understanding and assenting firmly to such propositions. And thus all mathematical demonstrations, as well as first principles, must be received as native impressions on the mind; which I fear they will scarce allow them to be, who find it harder to demonstrate a proposition, than assent to it when demonstrated. And few mathematicians will be forward to believe, that all the diagrams they have drawn, were but copies of those innate characters which nature had engraven upon their minds.

§ 23. *The Argument of assenting on first hearing, is upon a false supposition of no precedent teaching.*

THERE is, I fear, this farther weakness in the foregoing argument, which would persuade us, that therefore those maxims are to be thought innate, which men *admit at first hearing*, because they assent to propositions which they are not taught, nor do receive from the force of any argument or demonstration, but a bare explication or understanding of the terms. Under which there seems to me to lie this fallacy, That men are supposed not to be *taught*, nor to *learn* any thing *de novo*; when in truth they are taught, and do learn something they were ignorant of before. For *first*, it is evident, they have learned the terms and their signification; neither of which was born with them. But this is not all the acquired knowledge in the case. The *ideas* themselves, about which the proposition is, are not born with them, no more than their names, but got afterwards. So that in all propositions that are assented to, at first hearing; the terms of the proposition, their standing for such *ideas*, and the *ideas* themselves that they stand for, being neither of them innate; I would fain know what there is remaining in such propositions that is innate. For I would gladly have any one name that proposition, whose terms or *ideas* were either of them innate. We by degrees get *ideas* and names, and learn their appropriated connexion one with another; and then to propositions made in such terms, whose signification we have learnt, and wherein the agreement or disagreement we can perceive in our *ideas*, when put together, is expressed, we at first hearing assent: though, to other propositions in themselves as certain and evident, but which are concerning *ideas*, not so soon or so easily got, we are at the same time no way capable of assenting. For though a child quickly assents to this proposition, *That an apple is not fire*, when, by familiar acquaintance, he has got the *ideas* of those two different things distinctly imprinted on his mind, and has learnt that the names *apple* and *fire* stand for them; yet it will

be some years after, perhaps, before the same child will assent to this proposition, *That it is impossible for the same thing to be, and not to be.* Because, that though, perhaps, the words are as easy to be learnt, yet the signification of them being more large, comprehensive, and abstract, than of the names annexed to those sensible things the child hath to do with; it is no longer before he learns their precise meaning, and it requires more time plainly to form in his mind those general *ideas* they stand for. Till that be done, you will in vain endeavour to make any child assent to a proposition made up of such general terms; but as soon as ever he has got those *ideas*, and learned their names, he forwardly closes with the one as well as the other of the forementioned propositions: and with both for the same reason, viz. because he finds the *ideas* he has in his mind to agree or disagree, according as the words standing for them are affirmed, or denied one of another in the proposition. But if propositions be brought to him in words, which stand for *ideas* he has not yet in his mind; to such propositions, however evidently true or false in themselves, he affords neither assent nor dissent, but is ignorant. For words being but empty sounds any farther than they are signs of our *ideas*, we cannot but assent to them, as they correspond to those *ideas* we have, but no farther than that. But the showing by what steps and ways knowledge comes into our minds, and the grounds of several degrees of assent, being the business of the following discourse, it may suffice to have only touched on it here, as one reason that made me doubt of those innate principles.

§ 24. *Not Innate, because not universally assented to.*
To conclude this argument of *universal consent* I agree with these defenders of innate principles, that if they are *innate*, they must needs *have universal assent*. For that a truth should be innate, and yet not assented to, is to me as unintelligible as for a man to know a truth, and be ignorant of it at the same time. But then by these men's own confession, they cannot be

innate; since they are not assented to by those who understand not the terms, nor by a great part of those who do understand them, but have yet never heard, nor thought of those propositions; which, I think, is at least one half of mankind. But were the number far less, it would be enough to destroy *universal assent*, and thereby show these propositions not to be innate, if children alone were ignorant of them.

§ 25. *These Maxims not the first known.*

BUT that I may not be accused, to argue from the thoughts of infants, which are unknown to us, and to conclude, from what passes in their understandings, before they express it; I say next, that these two general propositions are not the truths that *first possess the minds* of children, nor are antecedent to all acquired and adventitious notions; which, if they were innate, they must needs be. Whether we can determine it or no, it matters not, there is certainly a time when children begin to think; and their words and actions do assure us that they do so. When therefore they are capable of thought, of knowledge, of assent, can it rationally be supposed they can be ignorant of those notions that nature has imprinted, were there any such? Can it be imagined, with any appearance of reason, that they perceive the impressions from things without; and be at the same time ignorant of those characters which nature itself has taken care to stamp within? Can they receive and assent to adventitious notions, and be ignorant of those which are supposed woven into the very principles of their being, and imprinted there in indelible characters, to be the foundation and guide of all their acquired knowledge, and future reasonings? This would be to make nature to take pains to no purpose, or, at least, to write very ill; since its characters could not be read by those eyes which saw other things very well; and those are very ill supposed the clearest parts of truth, and the foundations of all our knowledge, which are not first known, and without which the undoubted knowledge of several other things may be had

The child certainly knows that the *nurse* that feeds it, is neither the *cat* it plays with, nor the *blackmoor* it is afraid of; that the *wormseed* or *mustard* it refuses, is not the *apple* or *sugar* it cries for; this it is certainly and undoubtedly assured of: but will any one say, it is by virtue of this principle, *that it is impossible for the same thing to be, and not to be*, that it so firmly assents to these, and other parts of its knowledge? Or that the child has any notion or apprehension of that proposition at an age, wherein yet it is plain, it knows a great many other truths? He that will say, children join these general abstract speculations with their sucking bottles and their rattles, may, perhaps with justice, be thought to have more passion and zeal for his opinion, but less sincerity and truth than one of that age.

§ 26. *And so not Innate.*

THOUGH therefore there be several general propositions, that meet with constant and ready assent, as soon as proposed to men grown up, who have attained the use of more general, and abstract ideas, and names standing for them; yet they not being to be found in those of tender years, who nevertheless know other things, they cannot pretend to universal assent of intelligent persons, and so by no means can be supposed innate; it being impossible that any truth which is innate (if there were any such), should be unknown, at least to any one who knows any thing else: Since, if they are innate truths, they must be innate thoughts; there being nothing a truth in the mind that it has never thought on. Whereby it is evident, if there be any innate truths, they must necessarily be the first of any thought on, the first that appear there.

§ 27. *Not Innate, because they appear least, where what is Innate shows itself clearest.*

THAT the general maxims we are discoursing of, are not known to *children*, *idiots*, and a great part of *mankind*, we have already sufficiently proved; whereby it is evident they have not an universal assent, nor are general impressions. But there is this farther argument in it against their being innate; that these characters, if they

were native and original impressions, *should appear fairest and clearest* in those persons in whom yet we find no footsteps of them: And it is, in my opinion, a strong presumption that they are not innate, since they are least known to those, in whom, if they were innate, they must needs exert themselves with most force and vigour. For *children, idiots, savages, and illiterate* people, being of all others the least corrupted by custom or borrowed opinions; learning and education having not cast their native thoughts into new moulds, nor by superinducing foreign and studied doctrines, confounded those fair characters nature had written there: one might reasonably imagine, that in their minds these innate notions should lie open fairly to every one's view, as it is certain the thoughts of children do. It might very well be expected, that these principles should be perfectly known to naturals; which being stamped immediately on the soul (as these men suppose), can have no dependence on the constitutions, or organs of the body, the only confessed difference between them and others. One would think, according to these men's principles, that all these native beams of light (were there any such) should in those who have no reserves, no arts of concealment, shine out in their full lustre, and leave us in no more doubt of their being there, than we are of their love of pleasure, and abhorrence of pain. But alas! amongst *children, idiots, savages*, and the grossly *illiterate*, what general maxims are to be found? What universal principles of knowledge? Their notions are few and narrow, borrowed only from those objects they have had most to do with, and which have made upon their senses the frequentest and strongest impressions. A child knows his nurse and his cradle, and by degrees the playthings of a little more advanced age: And a young savage has, perhaps, his head filled with love and hunting, according to the fashion of his tribe. But he that from a child untaught, or a wild inhabitant of the woods, will expect these abstract maxims and reputed principles of sciences, will, I fear, find himself mistaken. Such kind of ge-

neral propositions are seldom mentioned in the huts of *Indians*, much less are they to be found in the thoughts of *children*, or any impressions of them on the minds of *naturals*. They are the language and business of the schools and academies of learned nations, accustomed to that sort of conversation or learning, where disputes are frequent: These maxims being suited to artificial argumentation, and useful for conviction; but not much conducing to the discovery of truth, or advancement of knowledge. But of their small use for the improvement of knowledge, I shall have occasion to speak more at large, l. 4. c. 7.

§. 28. *Recapitulation.*

I KNOW not how absurd this may seem to the masters of demonstration: And probably it will hardly down with any body at first hearing. I must therefore beg a little truce with prejudice, and the forbearance of censure, till I have been heard out in the sequel of this discourse, being very willing to submit to better judgments. And since I impartially search after truth, I shall not be sorry to be convinced that I have been too fond of my own notions: which I confess we are all apt to be, when application and study have warmed our heads with them.

Upon the whole matter, I cannot see any ground to think these two famed speculative maxims innate, since they are not universally assented to; and the assent they so generally find, is no other than what several propositions, not allowed to be innate, equally partake in with them: And since the assent that is given them is produced another way, and comes not from natural inscription, as I doubt not but to make appear in the following discourse. And if *these first principles* of knowledge and science are found not to be innate, no other speculative maxims can (I suppose) with better right pretend to be so.

CHAP. III.

NO INNATE PRACTICAL PRINCIPLES.

§ 1. *No moral Principles so clear and so generally received, as the forementioned speculative Maxims.*

IF those speculative maxims, whereof we discoursed in the foregoing chapter, have not an actual universal assent from all mankind, as we there proved, it is much more visible concerning *practical principles*, that they *come short of an universal reception*: And I think it will be hard to instance any one moral rule, which can pretend to so general and ready an assent, as, *What is, is*; or to be so manifest a truth as this, *That it is impossible for the same thing to be, and not to be*. Whereby it is evident, that they are farther removed from a title to be innate: and the doubt of their being native impressions on the mind, is stronger against these moral principles than the other. Not that it brings their truth at all in question. They are equally true, though not equally evident. Those speculative maxims carry their own evidence with them: But moral principles require reasoning and discourse, and some exercise of the mind, to discover the certainty of their truth. They lie not open as natural characters engraven on the mind; which, if any such were, they must needs be visible by themselves, and by their own light be certain and known to every body. But this is no derogation to their truth and certainty, no more than it is to the truth or certainty of the three angles of a triangle being equal to two right ones; because it is not so evident, as, *The whole is bigger than a part*; nor so apt to be assented to at first hearing. It may suffice, that these moral rules are capable of demonstration: And therefore it is our own fault, if we come not to a certain knowledge of them. But the ignorance wherein many men are of them, and the slowness of assent wherewith others receive them, are manifest proofs that they are not innate, and such as offer themselves to their view without searching.

§ 2. *Faith and Justice not owned as Principles by all Men.*

WHETHER there be any such moral principles, wherein all men do agree, I appeal to any who have been but moderately conversant in the history of mankind, and looked abroad beyond the smoke of their own chimneys. Where is that practical truth, that is universally received without doubt or question, as it must be if innate? *Justice*, and keeping of contracts, is that which *most men seem to agree in*. This is a principle which is thought to extend itself to the dens of thieves, and the confederacies of the greatest villains; and they who have gone farthest towards the putting off of humanity itself, keep faith and rules of justice one with another. I grant that outlaws themselves do this one amongst another; but it is without receiving these as the innate laws of nature. They practise them as rules of convenience within their own communities; but it is impossible to conceive, that he embraces justice as a practical principle, who acts fairly with his fellow-highwaymen, and at the same time plunders or kills the next honest man he meets with. Justice and truth are the common ties of society; and therefore even outlaws and robbers, who break with all the world besides, must keep faith and rules of equity amongst themselves, or else they cannot hold together. But will any one say, that those that live by fraud and rapine, have innate principles of truth and justice, which they allow and assent to?

§ 3. *Object. Though Men deny them in their Practice, yet they admit them in their Thoughts, answered.*

PERHAPS it will be urged, That the *tacit assent of their minds agrees to what their practice contradicts*. I answer, *first*, I have always thought the actions of men the best interpreters of their thoughts. But since it is certain, that most men's practice, and some men's open professions, have either questioned or denied these principles, it is impossible to establish an universal consent (though we should look for it only amongst grown men),

without which, it is impossible to conclude them innate. *Secondly*, It is very strange and unreasonable, to suppose innate practical principles, that terminate only in contemplation. Practical principles derived from nature, are there for operation, and must produce conformity of action, not barely speculative assent to their truth; or else they are in vain distinguished from speculative maxims. Nature, I confess, has put into man a desire of happiness, and an aversion to misery: These indeed are innate practical principles, which (as practical principles ought) do continue constantly to operate, and influence all our actions, without ceasing. These may be observed in all persons and all ages, steady and universal; but these are inclinations of the appetite to good, not impressions of truth on the understanding. I deny not, that there are natural tendencies imprinted on the minds of men; and that, from the very first instances of sense and perception, there are some things that are grateful, and others unwelcome to them; some things that they incline to, and others that they fly: But this makes nothing for innate characters on the mind, which are to be the principles of knowledge, regulating our practice. Such natural impressions on the understanding are so far from being confirmed hereby, that this is an argument against them; since, if there were certain characters imprinted by nature on the understanding, as the principles of knowledge, we could not but perceive them constantly operate in us, and influence our knowledge, as we do those others on the will and appetite; which never cease to be the constant springs and motives of all our actions, to which we perpetually feel them strongly impelling us.

§ 4. *Moral Rules need a Proof, ergo not Innate.*

ANOTHER reason that makes me doubt of any innate practical principles, is, That I think *there cannot any one moral rule be proposed, whereof a man may not justly demand a reason*: Which would be perfectly ridiculous and absurd, if they were innate, or so much as self-evident; which every innate principle must needs be, and not need any proof to ascertain its truth, nor want any rea-

son to gain its approbation. He would be thought void of common sense, who asked on the one side, or on the other side went to give a reason, *why it is impossible for the same thing to be, and not to be.* It carries its own light and evidence with it, and needs no other proof: He that understands the terms, assents to it for its own sake, or else nothing will ever be able to prevail with him to do it. But should that most unshaken rule of morality, and foundation of all social virtue, *That one should do as he would be done unto,* be proposed to one who never heard it before, but yet is of capacity to understand its meaning; might he not, without any absurdity, ask a reason why? And were not he that proposed it bound to make out the truth and reasonableness of it to him? Which plainly shows it not to be innate: for if it were, it could neither want nor receive any proof; but must needs (at least as soon as heard and understood) be received and assented to, as an unquestionable truth, which a man can by no means doubt of. So that the truth of all these moral rules plainly depends upon some other antecedent to them, and from which they must be deduced; which could not be, if either they were innate, or so much as self-evident.

§ 5. *Instance in keeping Compacts.*

THAT men should keep their compacts, is certainly a great and undeniable rule in morality: But yet, if a Christian, who has the view of happiness and misery in another life, be asked, why a man must keep his word, he will give this as a *reason*; Because God, who has the power of eternal life and death, requires it of us. But if an *Hobbist* be asked why, he will answer, Because the public requires it; and the *Leviathan* will punish you, if you do not. And if one of the old *Heathen* philosophers had been asked, he would have answered, Because it was dishonest, below the dignity of a man, and opposite to virtue, the highest perfection of human nature, to do otherwise.

§ 6. *Virtue generally approved, not because Innate, but because profitable.*

HENCE naturally flows the great variety of opinions concerning moral rules which are to be found amongst men, according to the different sorts of happiness they have a prospect of, or propose to themselves; which could not be, if practical principles were innate, and imprinted in our minds immediately by the hand of God. I grant the existence of God is so many ways manifest, and the obedience we owe him so congruous to the light of reason, that a great part of mankind give testimony to the law of nature: But yet I think it must be allowed, that several moral rules may receive from mankind a very general approbation, without either knowing or admitting the true ground of morality; which can only be the will and law of a God who sees men in the dark, has in his hand rewards and punishments, and power enough to call to account the proudest offender. For God having, by an inseparable connection, joined *virtue* and *public happiness* together, and made the practice thereof necessary to the preservation of society, and visibly *beneficial* to all with whom the virtuous man has to do; it is no wonder, that every one should not only allow, but recommend and magnify those rules to others, from whose observance of them he is sure to reap advantage to himself. He may, out of interest, as well as conviction, cry up that for sacred, which, if once trampled on and profaned, he himself cannot be safe nor secure. This, though it takes nothing from the moral and eternal obligation which these rules evidently have, yet it shows, that the outward acknowledgment men pay to them in their words, proves not that they are innate principles; nay, it proves not so much as that men assent to them inwardly in their own minds, as the inviolable rules of their own practice; since we find that self-interest, and the conveniencies of this life make many men own an outward profession and approbation of them, whose actions sufficiently prove, that they very little consider the lawgiver that prescribed these rules,

nor the hell he has ordained for the punishment of those that transgress them.

§ 7. *Men's actions convince us, that the rule of virtue is not their internal Principle.*

FOR if we will not in civility allow too much sincerity to the professions of most *men*, but think their actions to be the interpreters of their thoughts, we shall find, that they have no such internal veneration for these rules, nor so full a *persuasion of their certainty* and obligation. The great principle of morality, *to do as one would be done to*, is more commended than practised; but the breach of this rule cannot be a greater vice than to teach others, that it is no moral rule, nor obligatory, would be thought madness, and contrary to that interest men sacrifice to, when they break it themselves. Perhaps *conscience* will be urged as checking us for such breaches, and so the internal obligation and establishment of the rule be preserved.

§ 8. *Conscience no Proof of any Innate Moral Rule.*

To which I answer, That I doubt not but, without being written on their hearts, many men may, by the same way that they come to the knowledge of other things, come to assent to several moral rules, and be convinced of their obligation. Others also may come to be of the same mind, from their education, company, and customs of their country; which *persuasion, however got, will serve to set conscience on work*; which is nothing else but our own opinion or judgment of the moral rectitude or pravity of our own actions. And if conscience be a proof of innate principles, contraries may be innate principles; since some men with the same bent of conscience, prosecute what others avoid.

§ 9. *Instances of Enormities practised without remorse.*

BUT I cannot see how any *men* should ever transgress those moral rules with confidence and serenity, were they innate, and stamped upon their minds. View but an army at the sacking of a town, and see what observation, or sense of moral principles, or what touch of conscience, for all the outrages they do. *Robberies, murders, rapes*, are the sports of men set at liberty from punish-

ment and censure. Have there not been whole nations, and those of the most civilized people, amongst whom the exposing their children, and leaving them in the fields to perish by want or wild beasts, has been the practice, as little condemned or scrupled as the begetting them? Do they not still, in some countries, put them into the same graves with their mothers, if they die in childbirth; or despatch them, if a pretended astrologer declares them to have unhappy stars? And are there not places where, at a certain age, they kill or expose their parents, without any remorse at all? In a part of Asia, the sick, when their case comes to be thought desperate, are carried out, and laid on the earth, before they are dead, and left there, exposed to wind and weather, to perish without assistance or pity. (a) It is familiar among the Mingrelians, a people professing Christianity, to bury their children alive, without scruple. (b) There are places where they eat their own children. (c) The Caribbees were wont to geld their children, on purpose to salt and eat them. (d) And Garcilasso de la Vega tells us of a people in Peru, which were wont to fat and eat the children they got on their female captives, whom they kept as concubines for that purpose; and when they were past breeding, the mothers themselves were killed too and eaten. The (e) virtues whereby the Tououpiñambos believed they merited paradise, were revenge, and eating abundance of their enemies. (f) *They have not so much as a name for God, and have no religion, no worship.* The saints, who are canonized amongst the Turks, lead lives which one cannot with modesty relate. A remarkable passage to this purpose, out of the voyage of Boumgarten, which is a book not every day to be met with, I shall set down at large in the language it is published in. “Ibi
“sc. prope Belbes in Ægypto) vidimus sanctum unum

(a) Gruber apud Thevenot, Part II. p. 13.

(b) Lambert apud

Thevenot, p. 38.

(c) Vossius de Nili Origine, c. 18, 19.

(d) P. Mart. Dec. 1.

(e) Hist. des Incas, l. 1. c. 12.

(f) Lery, c. 15, 216, 231.

"Saracenicum inter arenarum cumulos, ita ut ex utero
 "matris prodiit nudum sedentem. Mos est, ut didici-
 "mus, Mahometistis, ut eos qui amentes et sine ra-
 "tione sunt, pro sanctis colant et venerentur. Insuper
 "et eos qui cum diu vitam egerint inquinatissiman, vo-
 "luntariam demum poenitentiam et paupertatem, sanc-
 "titate venerandos deputant. Ejusmodi vero genus
 "hominum libertatem quandam effroenem habent, do-
 "mos quas volunt intrandi, edendi, bibendi, et quod
 "majus est, concumbendi; ex quo concubitu, si proles
 "secuta fuerit, sancta similiter habetur. His ergo ho-
 "minibus, dum vivunt, magnos exhibent honores;
 "mortuis vero, vel templa vel monumenta extruunt
 "amplissima, eosque contingere ac sepelire maximæ for-
 "tunæ ducunt loco. Audivimus hæc dicta et dicenda
 "per interpretem a mucrelo nostro. Insuper sanctum
 "illum, quem eo loco vidimus, publicitus apprime
 "commendari, eum esse hominem sanctum, divinum
 "ac integritate præcipuum; eo quod, nec foeminarum
 "unquam esset, nec puerorum, sed tantum modo asel-
 "larum concubitor atque mularum." *Pergr. Boum-*
garten, l. 2. c. 1. p. 73. More of the same kind, con-
 cerning these precious saints amongst the Turks, may
 be seen in Pietro della Valle, in his letter of the 25th
 of January 1616. Where then are those innate prin-
 ciples of justice, piety, gratitude, equity, chastity? Or
 where is that universal consent, that assures us there are
 such inbred rules? Murders in duels, when fashion has
 made them honourable, are committed without remorse
 of conscience; nay, in many places, innocence in this
 case is the greatest ignominy. And if we look abroad,
 to take a view of men as they are, we shall find, that
 they have remorse, in one place, for doing or omitting
 that which others, in another place, think they merit
 by.

§ 10. *Men have contrary practical Principles.*

HE that will carefully peruse the history of mankind,
 and look abroad into the several tribes of men, and with
 indifferency survey their actions, will be able to satisfy
 himself, that there is scarce that principle of morality to

be named, or *rule of virtue* to be thought on (those only excepted that are absolutely necessary to hold society together, which commonly too are neglected betwixt distinct societies), which is not somewhere or other *sighted* and condemned by the general fashion of *whole societies* of men, governed by practical opinions, and rules of living quite opposite to others.

§ 11. *Whole Nations reject several moral Rules.*

HERE perhaps it will be objected, that it is no argument, that the *rule is not known, because it is broken*. I grant the objection good, where men, though they transgress, yet disown not the law; where fear of shame, censure, or punishment, carries the mark of some awe it has upon them. But it is impossible to conceive, that a *whole nation* of men should all *publicly reject* and renounce what every one of them, certainly and infallibly, knew to be a law; for so they must who have it naturally imprinted on their minds. It is possible men may sometimes own *rules of morality*, which in their private thoughts they do not believe to be true, only to keep themselves in reputation and esteem amongst those who are persuaded of their obligation. But it is not to be imagined, that a whole society of men should publicly and professedly disown, and cast off a rule, which they could not in their own minds but be infallibly certain was a law; nor be ignorant that all men they should have to do with, knew it to be such: And therefore must every one of them apprehend from others, all the contempt and abhorrence due to one who professes himself void of humanity, and one who, confounding the known and natural measures of right and wrong, cannot but be looked on as the professed enemy of their peace and happiness. Whatever practical principle is innate, cannot but be known to every one to be just and good. It is therefore little less than a contradiction to suppose, that whole nations of men should, both in their professions and practice, unanimously and universally give the lie to what, by the most invincible evidence, every one of them knew to be true, right.

and good. This is enough to satisfy us, that no practical rule, which is any where universally, and with public approbation or allowance, transgressed, can be supposed innate. But I have something farther to add in answer to this objection.

§ 12.

THE breaking of a rule, say you, is no argument that it is unknown. I grant it: But the *generally allowed breach of it any where*, I say, *is a proof that it is not innate*. For example: Let us take any of these rules, which being the most obvious deductions of human reason, and conformable to the natural inclination of the greatest part of men, fewest people have had the impudence to deny, or inconsideration to doubt of. If any can be thought to be naturally imprinted, none, I think, can have a fairer pretence to be innate than this; *Parents, preserve and cherish your children*. When, therefore, you say, that this is an innate rule, what do you mean? Either that it is an innate principle, which upon all occasions, excites and directs the actions of all men; or else, that it is a truth which all men have imprinted on their minds, and which therefore they know and assent to: but in neither of these senses is it innate. *First*, That it is not a principle, which influences all men's actions, is what I have proved by the examples before cited; nor need we seek so far as Mingrelia or Peru, to find instances of such as neglect, abuse, nay, and destroy their children; or look on it only as the more than brutality of some savage and barbarous nations, when we remember, that it was a familiar and uncondemned practice amongst the Greeks and Romans, to expose, without pity or remorse, their innocent infants. *Secondly*, That it is an innate truth, known to all men, is also false: For, *parents, preserve your children*, is so far from an innate truth, that it is no truth at all; it being a command, and not a proposition, and so not capable of truth or falsehood. To make it capable of being assented to as true, it must be reduced to some such proposition as this: *It is the duty of parents to preserve their children*. But what du-

ty is, cannot be understood without a law; nor a law be known or supposed without a lawmaker, or without reward and punishment: So that it is impossible that this or any other practical principle should be innate, *i. e.* be imprinted on the mind as a duty, without supposing the *ideas* of God, of law, of obligation, of punishment, of a life after this, innate: For that punishment follows not, in this life, the breach of this rule, and consequently that it has not the force of a law in countries where the generally allowed practice runs counter to it, is in itself evident. But these *ideas* (which must be all of them innate, if any thing as a duty be so) are so far from being innate, that it is not every studious or thinking man, much less every one that is born, in whom they are to be found clear and distinct: And that one of them, which of all others seems most likely to be innate, is not so (I mean the *idea* of God), I think, in the next chapter, will appear very evident to any considering man.

§ 13.

FROM what has been said, I think we may safely conclude, that *whatever practical rule is, in any place, generally and with allowance broken, cannot be supposed innate*; it being impossible that men should, without shame or fear, confidently and serenely break a rule, which they could not but evidently know that God had set up, and would certainly punish the breach of (which they must if it were innate) to a degree to make it a very ill bargain to the transgressor. Without such a knowledge as this, a man can never be certain that any thing is his duty. Ignorance or doubt of the law, hopes to escape the knowledge or power of the lawmaker, or the like, may make men give way to a present appetite: But let any one see the fault, and the rod by it, and with the transgression a fire ready to punish it; a pleasure tempting, and the hand of the Almighty visibly held up, and prepared to take vengeance (for this must be the case where any duty is imprinted on the mind), and then tell me, whether it be possible for people with such a prospect, such a certain knowledge as this, wantonly, and without

scruple, to offend against a law which they carry about them in indelible characters, and that stares them in the face whilst they are breaking it? Whether men, at the same time that they feel in themselves the imprinted edicts of an Omnipotent lawmaker, can, with assurance and gaiety, slight and trample under foot his most sacred injunctions? And lastly, whether it be possible, that whilst a man thus openly bids defiance to this innate law, and Supreme Lawgiver, all the bystanders, yea even the governors and rulers of the people, full of the same sense both of the law and lawmaker, should silently connive, without testifying their dislike, or laying the least blame on it? Principles of actions indeed there are lodged in men's appetites; but these are so far from being innate moral principles, that if they were left to their full swing, they would carry men to the overturning of all morality. Moral laws are set as a curb and restraint to these exorbitant desires, which they cannot be but by rewards and punishments that will overbalance the satisfaction any one shall propose to himself in the breach of the law. If therefore, any thing be imprinted on the minds of all men as a law, all men must have a certain and unavoidable knowledge, that certain and unavoidable punishment will attend the breach of it: For if men can be ignorant or doubtful of what is innate, innate principles are insisted on and urged to no purpose. Truth and certainty (the things pretended) are not at all secured by them; but men are in the same uncertain floating estate with as without them. An evident indubitable knowledge of unavoidable punishment, great enough to make the transgression very ineligible, must accompany an innate law; unless with an innate law they can suppose an innate gospel too. I would not here be mistaken, as if, because I deny an innate law, I thought there were none but positive laws. There is a great deal of difference between an innate law, and a law of nature; between something imprinted on our minds in their very original, and something that we being ignorant of may attain to the knowledge of, by the use and due application of our natural faculties. And I think they e-

qually forsake the truth, who, running into the contrary extremes, either affirm an innate law, or deny that there is a law knowable by the light of nature, *i. e.* without the help of positive revelation.

§ 14. *Those who maintain Innate practical Principles, tell us not what they are.*

THE difference there is amongst men in their practical principles, is so evident, that I think I need say no more to evince, that it will be impossible to find any innate moral rules by this mark of general assent: And it is enough to make one suspect, that the supposition of such innate principles, is but an opinion taken up at pleasure; since those who talk so confidently of them are so sparing to tell us *which they are*. This might with justice be expected from those men who lay stress upon this opinion: And it gives occasion to distrust either their knowledge or charity, who declaring, that God has imprinted on the minds of men the foundations of knowledge, and the rules of living, are yet so little favourable to the information of their neighbours, or the quiet of mankind, as not to point out to them which they are, in the variety men are distracted with. But, in truth, were there any such innate principles, there would be no need to teach them. Did men find such innate propositions stamped on their minds, they would easily be able to distinguish them from other truths, that they afterwards learned and deduced from them; and there would be nothing more easy than to know what and how many they were. There could be no more doubt about their number, than there is about the number of our fingers; and it is like then every system would be ready to give them us by tale. But since nobody that I know has ventured yet to give a catalogue of them, they cannot blame those who doubt of these innate principles; since even they who require men to believe that there are such innate propositions, do not tell us what they are. It is easy to foresee, that if different men of different sects should go about to give us a list of those innate practical principles, they would set down only such as suited their distinct hypo-

theses, and were fit to support the doctrines of their particular schools or churches; a plain evidence that there are no such innate truths. Nay, a great part of men are so far from finding any such innate moral principles in themselves, that by denying freedom to mankind, and thereby making men no other than bare machines, they take away not only innate, but all moral rules whatsoever, and leave not a possibility to believe any such, to those who cannot conceive how any thing can be capable of a law that is not a free agent: And upon that ground they must necessarily reject all principles of virtue, who cannot *put morality and mechanism together*, which are not very easy to be reconciled, or made consistent.

§ 15. *Lord Herbert's Innate Principles examined.*

WHEN I had writ this, being informed that my Lord Herbert had, in his books *De Veritate*, assigned these innate principles, I presently consulted him, hoping to find in a man of so great parts something that might satisfy me in this point, and put an end to my inquiry. In his chapter *De Instinctu Naturali*, p. 76. edit. 1656, I met with these six marks of his *Notitiæ Communes*.

1. *Prioritas*. 2. *Independentia*. 3. *Universalitas*. 4. *Certitudo*. 5. *Necessitas*; i. e. as he explains it, *faciunt ad hominis conservationem*. 6. *Modus conformationis*, i. e. *Affensus nulla interposita mora*. And at the latter end of his little treatise *De Religione Laici*, he says this of these innate principles, “*Adeo ut non uniuscujusvis religionis confinio arctentur quæ ubique vigent veritates. Sunt enim in ipsa mente cœlitus descriptæ nullisque traditionibus, sive scriptis, sive non scriptis, obnoxie*,” p. 3. And, “*Veritates nostræ Catholicæ, quæ tanquam indubia Dei effata in foro interiori descripta*.” Thus having given the marks of the innate principles, or common notions, and asserted their being imprinted on the minds of men by the hand of God, he proceeds to set them down, and they are these: 1. *Esse aliquod supremum Numen*. 2. *Numen illud coli debere*. 3. *Virtutem eum pietate conjunctam optimam esse rationem cultus divini*. 4. *Respiscendum esse a peccatis*.

5. *Dari premium vel pœnam post hanc vitam transfactam.* Though I allow these to be clear truths, and such as, if rightly explained, a rational creature can hardly avoid giving his assent to; yet I think he is far from proving them innate impressions, *in foro interiori descriptæ.* For I must take leave to observe,

§ 16.

First, THAT these five propositions are either not at all, or more than all, those common notions writ on our minds by the finger of God, if it were reasonable to believe any at all to be so written: Since there are other propositions, which, even by his own rules, have as just a pretence to such an original, and may be as well admitted for innate principles, as at least some of these five he enumerates, viz. *Do as thou wouldst be done unto;* and perhaps some hundreds of others, when well considered.

§ 17.

Secondly, THAT all his marks are not to be found in each of his five propositions, viz. his first, second, and third marks agree perfectly to neither of them; and the first, second, third, fourth, and sixth marks, but ill agree to his third, fourth, and fifth propositions. For, besides that we are assured from history, of many men, nay whole nations, who doubt or disbelieve some or all of them; I cannot see how the third, viz. *That virtue joined with piety is the best worship of God,* can be an innate principle, when the name or sound, *virtue,* is so hard to be understood; liable to so much uncertainty in its signification; and the thing it stands for, so much contended about, and difficult to be known. And therefore this can be but a very uncertain rule of human practice, and serve but very little to the conduct of our lives, and is therefore very unfit to be assigned as an innate practical principle.

§ 18.

FOR let us consider this proposition as to its meaning (for it is the sense, and not sound, that is and must be the principle or common notion), viz. *Virtue is the best worship of God;* i. e. is most acceptable to him; which if *virtue* be taken, as most commonly it is, for those

actions, which, according to the different opinions of several countries, are accounted laudable, will be a proposition so far from being certain, that it will not be true. If *virtue* be taken for actions conformable to God's will, or to the rule prescribed by God, which is the true and only measure of virtue, when virtue is used to signify what is in its own nature right and good; then this proposition, *That virtue is the best worship of God*, will be most true and certain, but of very little use in human life; since it will amount to no more but this, viz. *That God is pleased with the doing of what he commands*; which a man may certainly know to be true, without knowing what it is that God doth command; and so be as far from any rule or principles of his actions, as he was before: and I think very few will take a proposition which amounts to no more than this, viz. that God is pleased with the doing of what he himself commands, for an innate moral principle writ on the minds of all men (however true and certain it may be), since it teaches so little. Whosoever does so will have reason to think hundreds of propositions innate principles; since there are many, which have as good a title to this to be received for such, which nobody yet ever put into that rank of innate principles.

§ 19.

NOR is the fourth proposition, viz. *Men must repent of their sins*, much more instructive, till what those actions are that are meant by sins be set down: For the word *peccata*, or *sins*, being put, as it usually is, to signify in general ill actions, that will draw punishment upon the doers, what great principle of morality can that be to tell us we should be sorry, and cease to do that which will bring mischief upon us, without knowing what those particular actions are that will do so? Indeed this is a very true proposition, and fit to be inculcated on, and received by those who are supposed to have been taught what actions in all kinds are *sins*; but neither this nor the former can be imagined to be innate principles; nor to be of any use, if they were innate, unless the particular measures and bounds of all

virtues and vices, were engraven in men's minds, and were innate principles also, which I think is very much to be doubted. And therefore I imagine it will scarce seem possible, that God should engrave principles in men's minds, in words of uncertain signification, such as *virtues* and *sins*, which amongst different men stand for different things: Nay, it cannot be supposed to be in words at all, which, being in most of these principles very general names, cannot be understood, but by knowing the particulars comprehended under them. And in the practical instances, the measures must be taken from the knowledge of the actions themselves, and the rules of them, abstracted from words, and antecedent to the knowledge of names; which rules a man must know, what language soever he chance to learn, whether English or Japan, or if he should learn no language at all, or never should understand the use of words, as happens in the case of dumb and deaf men. When it shall be made out, that men ignorant of words, or untaught by the laws and customs of their country, know that it is part of the worship of God, Not to kill another man; Not to know more women than one; Not to procure abortion; Not to expose their children; Not to take from another what is his, though we want it ourselves, but, on the contrary, relieve and supply his wants; and whenever we have done the contrary, we ought to repent, be sorry, and resolve to do so no more: When, I say, all men shall be proved actually to know and allow all these, and a thousand other such rules, all which come under these two general words made use of above, viz. *Virtutes et peccata*, *Virtues and sins*, there will be more reason for admitting these and the like for common notions, and practical principles. Yet after all, universal consent (were there any in moral principles) to truths, the knowledge whereof may be attained otherwise, would scarce prove them to be innate; which is all I contend for.

§ 20. Object. *Innate Principles may be corrupted, answered.*

NOR will it be of much moment here to offer that very ready, but not very material answer, viz. That the *innate principles* of morality, *may, by education and custom,* and the general opinion of those amongst whom we converse, *be darkened,* and at last *quite worn out* of the minds of men. Which assertion of theirs, if true, quite takes away the argument of universal consent, by which this opinion of innate principles is endeavoured to be proved; unless those men will think it reasonable, that their private persuasions, or that of their party, should pass for universal consent; a thing not unfrequently done, when men, presuming themselves to be the only masters of right reason, cast by the votes and opinions of the rest of mankind, as not worthy the reckoning. And then their argument stands thus: The principles which all mankind allow for true, are innate; those that men of right reason admit, are the principles allowed by all mankind: we, and those of our mind, are men of reason; therefore we agreeing, our principles are innate: Which is a very pretty way of arguing, and a short cut to infallibility. For otherwise it will be very hard to understand, how there be some principles which all men do acknowledge, and agree in; and yet there are none of those *principles* which are *not by depraved custom and ill education, blotted out* of the minds of many men; which is to say, that all men admit, but yet many men do deny, and dissent from them. And indeed the supposition of such first principles will serve us to very little purpose; and we shall be as much at a loss with as without them, if they may by any human power, such as is the will of our teachers, or opinions of our companions, be altered or lost in us: And notwithstanding all this boast of first principles, and innate light, we shall be as much in the dark and uncertainty as if there were no such thing at all; it being all one to have no rule, and one that will warp any way; or amongst various and contrary rules, not to know which is the right. But concerning in-

nate principles, I desire these men to say, whether they can, or cannot, by education and custom, be blurred and blotted out: If they cannot, we must find them in all mankind alike, and they must be clear in every body: And if they may suffer variation from adventitious notions, we must then find them clearest and most perspicuous, nearest the fountain, in children and illiterate people, who have received least impression from foreign opinions. Let them take which side they please, they will certainly find it inconsistent with visible matter of fact, and daily observation.

§ 21. *Contrary Principles in the World.*

I EASILY grant, that there are great numbers of *opinions*, which, by men of different countries, educations, and tempers, are received and *embraced as first and unquestionable principles*; many *whereof*, both for their absurdity, as well as oppositions one to another, *it is impossible should be true*. But yet all those propositions, how remote soever from reason, are so sacred somewhere or other, that men, even of good understanding in other matters, will sooner part with their lives, and whatever is dearest to them, than suffer themselves to doubt, or others to question, the truth of them.

§ 22. *How Men commonly come by their Principles.*

THIS, however strange it may seem, is that which every day's experience confirms; and will not, perhaps, appear so wonderful, if we consider the *ways and steps by which* it is brought about; and how really it may come to pass, that *doctrines*, that have been derived from no better original than the superstition of a nurse, or the authority of an old woman, may by length of time, and consent of neighbours, *grow up to the dignity of principles* in religion or morality. For such, who are careful (as they call it) to principle children well (and few there be who have not a set of those principles for them, which they believe in), instil into the unwary, and as yet unprejudiced understanding (for white paper receives any characters), those doctrines they would have them retain and profess. These being taught them as soon as they have any apprehension, and still

as they grow up, confirmed to them, either by the open profession, or tacit consent of all they have to do with; or, at least, by those of whose wisdom, knowledge, and piety, they have an opinion, who never suffer those propositions to be otherwise mentioned, but as the basis and foundation on which they build their religion or manners: come by these means to have the reputation of unquestionable, self-evident, and innate truths.

§ 23.

To which we may add, That when *men*, so instructed, are grown up, and reflect on their own minds, they cannot find any thing more ancient there, than those opinions which were taught them before their memory began to keep a register of their actions, or date the time when any new thing appeared to them; and therefore make no scruple to conclude, *That those propositions, of whose knowledge they can find in themselves no original, were certainly the impress of God and nature upon their minds, and not taught them by any one else.* These they entertain, and submit to, as many do to their parents, with veneration; not because it is natural; nor do children do it, where they are not so taught: but because, having been always so educated, and having no remembrance of the beginning of this respect, they think it is natural.

§ 24.

THIS will appear very likely, and almost unavoidably to come to pass, if we consider the nature of mankind, and the constitution of human affairs; wherein *most men cannot live without employing their time in the daily labours of their callings; nor be at quiet in their minds, without some foundation or principles to rest their thoughts on.* There is scarce any one so floating, and superficial in his understanding, who hath not some revered propositions, which are to him the principles on which he bottoms his reasonings; and by which he judgeth of truth and falsehood, right and wrong; which, some wanting skill and leisure, and others the inclination, and some being taught, that they ought not to examine; there are few to be found who are not exposed

by their ignorance, laziness, education, or precipitancy to take them upon trust.

§ 25.

THIS is evidently the case of all children and young folk; and custom, a greater power than nature, seldom failing to make them worship for divine, what she hath inured them to bow their minds, and submit their understandings to, it is no wonder that grown men, either perplexed in the necessary affairs of life, or hot in the pursuit of pleasures, should *not* seriously sit down to examine their own tenets; especially when one of their principles is, That principles ought not to be questioned. And had men leisure, parts, and will, who is there almost that dare shake the foundations of all his past thoughts and actions, and endure to bring upon himself the shame of having been a long time wholly in mistake and error? Who is there hardy enough to contend with the reproach which is every where prepared for those who dare venture to dissent from the received opinions of their country or party? And where is the man to be found, that can patiently prepare himself to bear the name of Whimsical, Sceptical, or Atheist, which he is sure to meet with, who does in the least scruple any of the common opinions? And he will be much more afraid to question those principles, when he shall think them, as most men do, the standards set up by God in his mind, to be the rule and touchstone of all other opinions. And what can hinder him from thinking them sacred, when he finds them the earliest of all his own thoughts, and the most revered by others?

§ 26.

It is easy to imagine *how* by these means it comes to pass, that men worship the idols that have been set up in their minds; grow fond of the notions they have been long acquainted with there; and stamp the characters of divinity upon absurdities and errors, become zealous votaries to bulls and monkeys; and contend too, fight, and die in defence of their opinion. *Dum solos credit habendos esse Deos, quos ipse colit.* For since the

reasoning faculties of the soul, which are almost constantly, though not always warily nor wisely employed, would not know how to move, for want of a foundation and footing in most men; who through laziness or avocation do not, or for want of time, or true helps, or for other causes, cannot penetrate into the principles of knowledge, and trace truth to its fountain and original; it is natural for them, and almost unavoidable, to take up with some borrowed principles; which being reputed and presumed to be the evident proofs of other things, are thought not to need any other proof themselves. Whoever shall receive any of these into his mind, and entertain them there with the reverence usually paid to principles, never venturing to examine them, but accustoming himself to believe them, because they are to be believed, may take up from his education, and the fashions of his country, any absurdity for innate principles; and by long poring on the same objects, so dim his sight, as to take monsters lodged in his own brain, for the images of the Deity, and the workmanship of his hands.

§ 27. *Principles must be examined.*

By this progress, how many there are who arrive at principles, which they believe innate, may be easily observed, in the variety of opposite principles held and contended for by all sorts and degrees of men. And he that shall deny this to be the method, wherein most men proceed to the assurance they have of the truth and evidence of their principles, will perhaps find it a hard matter any other way to account for the contrary tenets, which are firmly believed, confidently asserted, and which great numbers are ready at any time to seal with their blood. And, indeed, if it be the privilege of innate principles to be received upon their own authority without examination, I know not what may not be believed, or how any one's *principles* can be questioned. If they may, and *ought to be examined* and tried, I desire to know how first and innate principles can be tried; or, at least, it is reasonable to demand the marks and characters, whereby the genuine innate principles may be

distinguished from others; that so, amidst the great variety of pretenders, I may be kept from mistakes, in so material a point as this. When this is done, I shall be ready to embrace such welcome and useful propositions, and till then I may with modesty doubt, since I fear universal consent, which is the only one produced, will scarce prove a sufficient mark to direct my choice, and assure me of any innate principles. From what has been said, I think it past doubt, that there are no practical principles wherein all men agree; and therefore none innate.

CHAP. IV.

OTHER CONSIDERATIONS CONCERNING INNATE PRINCIPLES, BOTH SPECULATE AND PRACTICAL.

§ 1. *Principles not Innate, unless their Ideas be Innate.*

HAD those, who would persuade us that there are innate principles, not taken them together in gross, but considered separately the parts out of which those propositions are made; they would not perhaps, have been so forward to believe they were innate: Since, if the *ideas* which made up those truths were not, it was impossible that the propositions made up of them should be innate, or our knowledge of them be born with us. For if the *ideas* be not *innate*, there was a time when the mind was without those principles; and then they will not be innate, but be derived from some other original. For, where the *ideas* themselves are not, there can be no knowledge, no assent, no mental or verbal propositions about them.

§ 2. *Ideas, especially those belonging to Principles, not born with Children.*

IF we will attentively consider new-born *children*, we shall have little reason to think that they bring many *ideas* into the world with them. For bating perhaps some faint *ideas* of hunger, and thirst, and warmth, and some pains which they may *have* felt in the womb, there is *not* the least appearance of any settled *ideas* at

all in them; especially of ideas *answering the terms, which make up those universal propositions* that are esteemed innate principles. One may perceive how, by degrees, afterwards, *ideas* come into their minds; and that they get no more, nor no other, than what experience, and the observation of things, that come in their way, furnish them with; which might be enough to satisfy us, that they are not original characters, stamped on the mind.

§ 3.

It is impossible for the same thing to be, and not to be, is certainly (if there be any such) an innate principle. But can any one think, or will any one say, that *impossibility* and *identity* are two innate *ideas*? Are they such as all mankind have, and bring into the world with them? And are they those that are the first in children, and antecedent to all acquired ones? If they are innate, they must needs be so. Hath a child an *idea* of *impossibility* and *identity*, before it has of *white* or *black*, *sweet* or *bitter*? And is it from the knowledge of this principle, that it concludes, that wormwood rubbed on the nipple hath not the same taste that it used to receive from thence? Is it the actual knowledge of *impossibile est idem esse, et non esse*, that makes a child distinguish between its mother and a stranger; or that makes it fond of the one, and fly the other? Or does the mind regulate itself and its assent by *ideas*, that it never yet had? Or the understanding draw conclusions from principles, which it never yet knew or understood? The names *impossibility* and *identity* stand for two *ideas*, so far from being innate, or born with us, that I think it requires great care and attention to form them right in our understandings. They are so far from being brought into the world with us, so remote from the thoughts of infancy and childhood; that, I believe, upon examination, it will be found that many grown men want them.

§ 4. *Identity, an Idea, not Innate.*

IF *identity* (to instance in that alone) be a native impression, and consequently so clear and obvious to us,

that we must needs know it even from our cradles; I would gladly be resolved by one of seven, or seventy years old, whether a man, being a creature, consisting of soul and body, be the same man when his body is changed? Whether Euphorbus and Pythagoras, having had the same soul, were the same man, though they lived several ages asunder? Nay, whether the cock too, which had the same soul, were not the same with both of them? Whereby, perhaps, it will appear, that our *idea of sameness* is not so settled and clear, as to deserve to be thought *innate* in us. For if those innate *ideas* are not clear and distinct, so as to be universally known, and naturally agreed on, they cannot be subjects of universal and undoubted truths; but will be the unavoidable occasion of perpetual uncertainty. For, I suppose, every one's *idea of identity* will not be the same that Pythagoras, and thousands others of his followers have: And which then shall be the true? Which innate? Or are there two different *ideas of identity*, both innate.

§ 5.

NOR let any one think, that the questions I have here proposed about the *identity* of man, are bare empty speculations; which, if they were, would be enough to show, that there was in the understandings of men, *no innate idea of identity*. He that shall, with a little attention, reflect on the resurrection, and consider that divine justice shall bring to judgment, at the last day, the very same persons, to be happy or miserable in the other, who did well or ill in this life; will find it perhaps not easy to resolve with himself, what makes the same man, or wherein *identity* consists: And will not be forward to think he, and every one, even children themselves, have naturally a clear *idea* of it.

§ 6. *Whole and Part not Innate Ideas.*

LET us examine that principle of mathematics, viz. *That the whole is bigger than a part*. This, I take it, is reckoned amongst innate principles. I am sure it has as good a title as any to be thought so; which yet nobody

can think it to be, when he considers the *ideas* it comprehends in it, *whole* and *part*, are perfectly relative: but the positive *ideas*, to which they properly and immediately belong, are extension and number, of which alone *whole* and *part* are relations. So that if *whole* and *part* are innate *ideas*, extension and number must be so too: it being impossible to have an *idea* of a relation, without having any at all of the thing to which it belongs, and in which it is founded. Now, whether the minds of men have naturally imprinted on them the *ideas* of extension and number, I leave to be considered by those who are the patrons of innate principles.

§ 7. *Idea of Worship not Innate.*

THAT *God is to be worshipped*, is, without doubt, as great a truth as any can enter into the mind of man, and deserves the first place amongst all practical principles; but yet it can by no means be thought innate, unless the *ideas* of *God* and *worship* are innate. That the *idea* the term *worship* stands for, is not in the understanding of children, and a character stamped on the mind in its first original, I think, will be easily granted by any one that considers how few there be amongst grown men, who have a clear and distinct notion of it. And I suppose there cannot be any thing more ridiculous, than to say that children have this practical principle innate, *that God is to be worshipped*; and yet, that they know not what that worship of God is, which is their duty. But to pass by this:

§ 8. *Idea of God not Innate.*

If any *idea* can be imagined innate, the *idea of God* may, of all others, for many reasons, be thought so; since it is hard to conceive, how there should be innate moral principles, without an innate *idea* of a *Deity*: without a notion of a lawmaker, it is impossible to have a notion of a law, and an obligation to observe it. Besides the atheists, taken notice of amongst the ancients, and left branded upon the records of history, hath not navigation discovered, in these latter ages, whole nations, as

the bay of Soldania (a), in Brasil (b), in Boranday (c), and the Caribbee Islands, &c. amongst whom there was to be found no notion of a God, no religion? *Nicholaus del Techo, in literis ex Paraquaria de Caaiguarum conversione*, has these words (d): *Reperi eam gentem nulum nomen habere quod Deum et hominis animam significet, nulla sacra habet, nulla idola*. These are instances of nations, where uncultivated nature has been left to itself, without the help of letters, and discipline, and the improvement of arts and sciences. But there are others to be found, who have enjoyed these in a very great measure; who yet, for want of a due application of their thoughts this way, want the *idea* and knowledge of God. It will, I doubt not, be a surprise to others, as it was to me, to find the Siamites of this number. But for this, let them consult the king of France's late envoy thither (e), who gives no better account of the Chineses themselves (f). And if we will not believe *La Loubere*, the missionaries of China, even the Jesuits themselves, the great encomiasts of the Chineses, do all to a man agree, and will convince us that the sect of the *literati* or *learned*, keeping to the old religion of China, and the ruling party there, are all of them *atheists*. Vid. *Navarette* in the collection of voyages, vol. the first, and *Historia Cultus Sinensium*. And perhaps if we should, with attention, mind the lives and discourses of people not far off, we should have too much reason to fear, that many in more civilized countries have no very strong and clear impressions of a Deity upon their minds; and that the complaints of atheism, made from the pulpit, are not without reason. And though only some profligate wretches own it too barefacedly now; yet perhaps we should hear more than we do of it from others, did not the fear of the magistrate's sword, or their neighbour's cen-

(a) Rhoe apud Thevenot, p. 2. (b) Jo. de Lery, c. 16. (c) Martiniere, 201-322. Terry, 17-545 et 23-545. Ovington, 489-606. (d) Relatio triplex de rebus Indicis Caaiguarum 43-70. (e) La Loubere du Royaume de Siam. T. 1. c. 9. sect. 15, &c. 20. sect. 22, &c. sect. 6. (f) Ib. T. 1. c. 20. sect. 4, &c. 23.

sure, tie up people's tongues ; which, were the apprehensions of punishment or shame taken away, would as openly proclaim their *atheism*, as their lives do.

§ 9.

BUT had all mankind, every where, a *notion of a God* (whereof yet history tells us the contrary), it would *not* from thence follow, that the *idea* of him was *innate*. For though no nation were to be found without a name, and some few dark notions of him ; yet that would not prove them to be natural impressions on the mind, no more than the names of fire, or the sun, heat, or number, do prove the *ideas* they stand for, to be innate : because the names of those things, and the *ideas* of them, are so universally received and known amongst mankind. Nor, on the contrary, is the want of such a name, or the absence of such a notion out of men's minds, any argument against the being of a God ; any more than it would be a proof that there was no loadstone in the world, because a great part of mankind had neither a notion of any such thing, nor a name for it ; or be any show of argument to prove, that there are no distinct and various species of angels, or intelligent beings above us, because we have no *ideas* of such distinct species, or names for them : For men, being furnished with words by the common language of their own countries, can scarce avoid having some kind of *ideas* of those things, whose names, those they converse with, have occasion frequently to mention to them. And if it carry with it the notion of excellency, greatness, or something extraordinary ; if apprehension and concernment accompany it ; if the fear of absolute and irresistible power set it on the mind, the *idea* is likely to sink the deeper, and spread the farther, especially, if it be such an *idea*, as is agreeable to the common light of reason, and naturally deducible from every part of our knowledge, as that of a God is. For the visible marks of extraordinary wisdom and power appear so plainly in all the works of the creation, that a rational creature, who will but seriously reflect on them, cannot miss the discovery of a *Deity*. And the

influence that the discovery of such a being must necessarily have on the minds of all, that have but once heard of it, is so great, and carries such a weight of thought and communication with it, that it seems stranger to me, that a whole nation of men should be any where found so brutish, as to want the notion of a God; than that they should be without any notion of numbers or fire.

§ 10.

THE name of God being once mentioned in any part of the world, to express a superior, powerful, wise, invisible Being, the suitableness of such a notion to the principles of common reason, and the interest men will always have to mention it often, must necessarily spread it far and wide, and continue it down to all generations; though yet the general *reception of this name, and some imperfect and unsteady notions conveyed thereby* to the unthinking part of mankind, *prove not the idea to be innate*; but only that they, who made the discovery, had made a right use of their reason, thought maturely of the causes of things, and traced them to their original; from whom other less considering people having once received so important a notion, it could not easily be lost again.

§ 11.

THIS is all could be inferred from the notion of a God, were it to be found universally in all the tribes of mankind, and generally acknowledged by men grown to maturity in all countries. For the generality of the acknowledging of a God, as I imagine, is extended no farther than that; which, if it be sufficient to prove the *idea of God innate*, will as well prove the *idea of fire innate*: Since, I think, it may truly be said, that there is not a person in the world, who has a notion of a God, who has not also the *idea of fire*. I doubt not, but if a colony of young children should be placed in an island where no fire was, they would certainly neither have any notion of such a thing, nor name for it, how generally soever it were received, and known in all the world besides: and perhaps, too, their apprehension

would be as far removed from any name, or notion of a God, till some one amongst them had employed his thoughts to inquire into the constitution and causes of things, which would easily lead him to the notion of a God: which having once taught to others, reason, and the natural propensity of their own thoughts, would afterwards propagate, and continue amongst them.

§ 12. *Suitable to GOD's Goodness, that all Men should have an Idea of him, therefore naturally imprinted by him; answered.*

INDEED it is urged, That it is *suitable to the goodness of God, to imprint upon the minds of men, characters and notions of himself*, and not to leave them in the dark and doubt in so grand a concernment; and also by that means to secure to himself the homage and veneration due from so intelligent a creature as man; and therefore he has done it.

This argument, if it be of any force, will prove much more than those who use it in this case expect from it. For if we may conclude, that *God hath done for men all that men shall judge is best for them*, because it is suitable to his goodness so to do; it will prove not only that God has imprinted on the minds of men an *idea* of himself, but that he hath plainly stamped there, in fair characters, all that men ought to know or believe of him, all that they ought to do in obedience to his will; and that he hath given them a will and affections conformable to it. This, no doubt, every one will think better for men, than that they should in the dark grope after knowledge, as *St. Paul* tells us all nations did after God, *Acts* xvii. 27. than that their wills should clash with their understandings, and their appetites cross their duty. The *Romanists* say, it is best for men, and so suitable to the goodness of God, that there should be an infallible judge of controversies on earth; and therefore there is one. And I, by the same reason, say, it is better for men that every man himself should be infallible. I leave them to consider, whether, by the force of this argument, they shall think that every man is so. I think it a very

good argument to say, the infinitely wise God hath made it so: and therefore it is best. But it *seems to me a little too much confidence of our own wisdom, to say, I think it best, and therefore God hath made it so*: and in the matter in hand, it will be in vain to argue from such a topic that God hath done so, when certain experience shows us that he hath not. But the goodness of God hath not been wanting to men without such original impressions of knowledge, or *ideas* stamped on the mind: since he hath furnished man with those faculties, which will serve for the sufficient discovery of all things requisite to the end of such a being. And I doubt not, but to show that a man, by the right use of his natural abilities, may, without any innate principles, attain the knowledge of a God, and other things that concern him. God having endued man with those faculties of knowing which he hath, was no more obliged by his goodness to implant those innate notions in his mind, than that having given him reason, hands, and materials, he should build him bridges or houses: which some people in the world, however of good parts, do either totally want, or are but ill provided of, as well as others are wholly without *ideas of God*, and principles of morality; or, at least, have but very ill ones. The reason in both cases being, that they never employed their parts, faculties, and powers, industriously that way, but contented themselves with the opinions, fashions, and things of their country, as they found them, without looking any farther. Had you or I been born at the Bay of Soldania, possibly our thoughts and notions had not exceeded those brutish ones of the Hottentots that inhabit there: And had the Virginia king Apochancana been educated in England, he had perhaps been as knowing a divine, and as good a mathematician, as any in it. The difference between him and a more improved Englishman lying barely in this, that the exercise of his faculties was bounded within the ways, modes, and notions of his own country, and never directed to any other, or farther inquiries: And if he had not any *idea* of a God, it was

only because he pursued not those thoughts that would have led him to it.

§ 13. *Ideas of GOD various in different Men.*

I GRANT, that if there were *any ideas* to be found *imprinted* on the minds of men, we have reason to expect *it should be the notion of their Maker*, as a mark GOD set on his own workmanship, to mind man of his dependence and duty; and that herein should appear the first instances of human knowledge. But how late is it before any such notion is discoverable in children? And when we find it there, how much more does it resemble the opinion and notion of the teacher, than represent the true God? He that shall observe in children the progress whereby their minds attain the knowledge they have, will think that the objects they do first and most familiarly converse with, are those that make the first impressions on their understandings: nor will he find the least footsteps of any other. It is easy to take notice how their thoughts enlarge themselves, only as they come to be acquainted with a greater variety of sensible objects, to retain the *ideas* of them in their memories; and to get the skill to compound and enlarge them, and several ways put them together. How by these means they come to frame in their minds an *idea* men have of a Deity, I shall hereafter show.

§ 14.

CAN it be thought, that the *ideas* men have of God, are the characters and marks of himself, engraven in their minds by his own finger; when we see that in the same country, under one and the same name, *men have far different*, nay, often *contrary and inconsistent ideas* and conceptions of him? Their agreeing in a name or sound will scarce prove an innate notion of him.

§ 15.

WHAT true or tolerable notion of a *Deity* could they have, who acknowledged and worshipped hundreds? Every deity that they owned above one, was an infallible evidence of their ignorance of him, and a proof that they had no true notion of God, where unity, infinity, and eternity were excluded. To which if we add their gross conceptions of corporeity, expressed in

their images and representations of their deities; the amours, marriages, copulations, lusts, quarrels, and other mean qualities attributed by them to their gods, we shall have little reason to think, that the heathen world, *i. e.* the greatest part of mankind, had such *ideas* of God in their minds, as he himself, out of care that they should not be mistaken about him, was author of. And this universality of consent, so much argued, if it prove any native impressions, it will be only this, That God imprinted on the minds of all men, speaking the same language, a name for himself, but not any *idea*; since those people, who agreed in the name, had at the same time far different apprehensions about the thing signified. If they say, that the variety of deities worshipped by the heathen world, were but figurative ways of expressing the several attributes of that incomprehensible Being, or several parts of his providence: I answer, What they might be in their original, I will not here inquire; but that they were so in the thoughts of the vulgar, I think nobody will affirm. And he that will consult the voyage of the Bishop of *Beryte*, c. 13. (not to mention other testimonies) will find, that the theology of the Siamites professedly owns a plurality of gods: Or, as the *Abbé de Choisy* more judiciously remarks, in his journal *du Voyage de Siam*, 107-177, it consists properly in acknowledging no god at all.

If it be said, that *wise men* of all nations came to *have true conceptions* of the unity and infinity of the Deity, I grant it. But then this,

First, Excludes universality of consent in any thing but the name; for those wise men being very few, perhaps one of a thousand, this universality is very narrow.

Secondly, It seems to me plainly to prove, that the truest and best notions men had of God were not imprinted, but acquired by thought and meditation, and a right use of their faculties; since the wise and considerate men of the world, by a right and careful employment of their thoughts and reason, attained true-

notions in this as well as other things; whilst the lazy and inconsiderate part of men, making the far greater number, took up their notions by chance, from common tradition and vulgar conceptions, without much beating their heads about them. And if it be a reason to think *the notion of God innate*, because all wise men had it, virtue too must be thought innate, for that also wise men have always had.

§ 16.

THIS was evidently the case of all *Gentilism*: Nor hath even amongst Jews, Christians, and Mahometans, who acknowledge but one God, this doctrine, and the care taken in those nations to teach men to have true notions of a GOD, prevailed so far as to make men to have the same, and true *ideas* of him. How many, even amongst us, will be found, upon inquiry, to fancy him in the shape of a man, sitting in heaven, and to have many other absurd and unfit conceptions of him? Christians, as well as Turks, have had whole sects owning and contending earnestly for it, that the Deity was corporeal, and of human shape: And though we find few amongst us who profess themselves Anthropomorphites (though some I have met with that own it), yet I believe he that will make it his business, may find, amongst the ignorant and uninstructed Christians, many of that opinion. Talk but with country people, almost of any age, or young people, almost of any condition; and you shall find, that though the name of GOD be frequently in their mouths; yet the notions they apply this name to, are so odd, low and pitiful, that nobody can imagine they were taught by a rational man, much less that they were characters writ by the finger of God himself. Nor do I see how it derogates more from the goodness of God, that he has given us minds unfurnished with these *ideas* of himself, than that he hath sent us into the world with bodies unclothed, and that there is no art or skill born with us: For being fitted with faculties to attain these, it is want of industry and consideration in us, and not of bounty in him, if we have them not. It

is as certain that there is a God, as that the opposite angles made by the intersection of two straight lines, are equal. There was never any rational creature, that set himself sincerely to examine the truth of these propositions, that could fail to assent to them; though yet it be past doubt, that there are many men, who having not applied their thoughts that way, are ignorant both of the one and the other. If any one think fit to call this (which is the utmost of its extent) universal consent, such an one I easily allow; but such an universal consent as this, proves not the *idea* of God, no more than it does the *idea* of such angles, *innate*.

§ 17. *If the Idea of GOD be not Innate, no other can be supposed Innate.*

SINCE then though the knowledge of a GOD be the most natural discovery of human reason, yet the *idea* of him is *not innate*, as, I think is evident, from what has been said; I imagine there will scarce be any other *idea* found, that can pretend to it: Since if God had set any impression, any character on the understanding of men, it is most reasonable to expect it should have been some clear and uniform *idea* of himself, as far as our weak capacities were capable to receive so incomprehensible and infinite an object. But our minds being at first void of ~~that~~ *idea* which we are most concerned to have, it is a *strong presumption against all other innate characters*. I must own, as far as I can observe, I can find none, and would be glad to be informed by any other.

§ 18. *Idea of Substance not Innate.*

I CONFESS there is another *idea*, which would be of general use for mankind to have, as it is of general talk, as if they had it; and that is the *idea of substance*, which we neither have, nor can have, by *sensation* or *reflection*. If nature took care to provide us any *ideas*, we might well expect they should be such, as by our own faculties we cannot procure to ourselves: but we see, on the contrary, that since by those ways whereby other *ideas* are brought into our minds, this is not; we have no such *clear idea* at all, and therefore signify nothing by

the word *substance*, but only an uncertain supposition of we know not what, *i. e.* (of some thing whereof we have no particular distinct positive) *idea*, which we take to be the *substratum*, or support, of those *ideas* we do know.

§ 19. *No Propositions can be Innate, since no Ideas are Innate.*

WHATEVER then we talk of innate, either *speculative* or *practical principles*, it may, with as much probability, be said, that a man hath 100l. Sterling in his pocket, and yet denied that he hath either penny, shilling, crown, or any other coin, out of which the sum is to be made up; as to think that certain propositions are innate, when the *ideas* about which they are can by no means be supposed to be so. The general reception and assent that is given, doth not at all prove that the *ideas* expressed in them are innate: For in many cases, however the *ideas* came there, the assent to words, expressing the agreement or disagreement of such *ideas*, will necessarily follow. Every one, that hath a true *idea* of *God* and *worship*, will assent to this proposition, That *God* is to be worshipped, when expressed in a language he understands: And every rational man, that hath not thought on it to-day, may be ready to assent to this proposition to-morrow; and yet millions of men may be well supposed to want one or both of those *ideas* to-day. For if we will allow savages and most country people to have *ideas* of *God* and *worship* (which conversation with them will not make one forward to believe), yet I think few children can be supposed to have those *ideas*, which therefore they must begin to have some time or other: and then they will also begin to assent to that proposition, and make very little question of it ever after. But such an assent upon hearing, no more proves the *ideas* to be innate, than it does that one born blind (with cataracts, which will be couched to-morrow) had the innate *ideas* of the sun, or light, or saffron, or yellow; because, when his sight is cleared, he will certainly assent to this proposition, That the sun is lucid, or that saffron is yellow: and therefore if such an assent upon hearing

cannot prove the *ideas* innate, it can much less the propositions made up of those *ideas*. If they have any innate *ideas*, I would be glad to be told what, and how many they are.

§ 20. *No Innate Ideas in the Memory.*

To which let me add: If there be any innate *ideas*, any *ideas* in the mind, which the mind does not actually think on, they must be lodged in the memory, and from thence must be brought into view by remembrance; *i. e.* must be known, when they are remembered, to have been perceptions in the mind before, unless remembrance can be without remembrance. For to remember is to perceive any thing with memory, or with a consciousness, that it was known or perceived before: without this, whatever *idea* comes into the mind is new, and not remembered; this consciousness of its having been in the mind before, being that which distinguishes remembering from all other ways of thinking. Whatever *idea* was never perceived by the mind, was never in the mind. Whatever *idea* is in the mind, is either an actual perception; or else having been an actual perception, is so in the mind, that by the memory it can be made an actual perception again. Whenever there is the actual perception of an *idea* without memory, the *idea* appears perfectly new and unknown before to the understanding. Whenever the memory brings any *idea* into actual view, it is with a consciousness that it had been there before, and was not wholly a stranger to the mind. Whether this be not so, I appeal to every one's observation: and then I desire an instance of an *idea* pretended to be innate, which (before any impression of it, by ways hereafter to be mentioned) any one could revive and remember as an *idea* he had formerly known, without which consciousness of a former perception, there is no remembrance; and whatever *idea* comes into the mind without that consciousness, is not remembered, or comes not out of the memory, nor can be said to be in the mind before that appearance: For what is not either actually in view, or in the memory, is in the mind

no way at all, and is all one as if it never had been there. Suppose a child had the use of his eyes, till he knows and distinguishes colours; but then cataracts shut the windows, and he is forty or fifty years perfectly in the dark, and in that time perfectly loses all memory of the *ideas* of colours he once had. This was the case of a blind man I once talked with, who lost his sight by the small-pox when he was a child, and had no more notion of colours than one born blind. I ask, Whether any one can say this man had then any *ideas* of colours in his mind, any more than one born blind? And I think nobody will say, that either of them had in his mind any *idea* of colours at all. His cataracts are couched, and then he has the *ideas* (which he remembers not) of colours, *de novo*, by his restored sight conveyed to his mind, and that without any consciousness of a former acquaintance; and these now he can revive, and call to mind in the dark. In this case all these *ideas* of colours, which, when out of view, can be revived with a consciousness of a former acquaintance, being thus in the memory, are said to be in the mind. The use I make of this is, that whatever *idea* being not actually in view, is in the mind, is there only by being in the memory; and if it be not in the memory, it is not in the mind; and if it be in the memory, it cannot by the memory be brought into actual view, without a perception that it comes out of the memory; which is this, that it had been known before, and is now remembered. If therefore there be any innate *ideas*, they must be in the memory, or else no where in the mind; and if they be in the memory, they can be revived without any impression from without; and whenever they are brought into the mind, they are remembered, *i. e.* they bring with them a perception of their not being wholly new to it. This being a constant and distinguishing difference between what is, and what is not in the memory, or in the mind; that what is not in the memory, whenever it appears there, appears perfectly new and unknown before; and what is

in the memory, or in the mind, whenever it is suggested by the memory, appears not to be new, but the mind finds it in itself, and knows it was there before. By this it may be tried, whether there be any innate *ideas* in the mind, before impression from *sensation* or *reflection*. I would fain meet with the man, who, when he came to the use of reason, or at any other time, remembered any of them; and to whom, after he was born, they were never new. If any one will say, there are *ideas* in the mind that are not in the memory, I desire him to explain himself, and make what he says intelligible.

§ 21. *Principles not Innate, because of little Use or little Certainty.*

BESIDES what I have already said, there is another reason why I doubt, that neither these, nor any other principles, are innate. I that am fully persuaded, that the infinitely wise God made all things in perfect wisdom, cannot satisfy myself why he should be supposed to print upon the minds of men some universal *principles*, whereof those that are pretended innate, and concern *speculation*, are of no great use; and those that concern *practice* not self-evident; and neither of them distinguishable from some other truths, not allowed to be innate. For to what purpose should characters be graven on the mind by the finger of God, which are not clearer there than those which are afterwards introduced, or cannot be distinguished from them? If any one thinks there are such innate *ideas* and propositions, which, by their clearness and usefulness, are distinguishable from all that is adventitious in the mind and acquired, it will not be a hard matter for him to tell us which they are; and then every one will be a fit judge, whether they be so or no; since, if there be such innate *ideas* and impressions, plainly different from all other perceptions and knowledge, every one will find it true in himself. Of the evidence of these supposed innate maxims, I have spoken already; of their usefulness, I shall have occasion to speak more hereafter.

§ 22. *Difference of Men's Discoveries depends upon the different application of their Faculties.*

To conclude : Some *ideas* forwardly offer themselves to all men's understandings ; some sorts of truths result from any *ideas*, as soon as the mind puts them into propositions ; other truths require a train of *ideas* placed in order, a due comparing of them, and deductions made with attention before they can be discovered and assented to. Some of the first sort, because of their general and easy reception, have been mistaken for innate ; but the truth is, *ideas* and notions are no more born with us than arts and sciences ; though some of them indeed offer themselves to our faculties more readily than others, and therefore are more generally received ; though that too be according as the organs of our bodies and powers of our minds happen to be employed : *God having fitted men with faculties and means to discover, receive and retain truths, according as they are employed.* The great difference that is to be found in the notions of mankind, is from the different use they put their faculties to ; whilst some (and those the most) taking things upon trust, misemploy their power of assent, by lazily enslaving their minds to the dictates and dominion of others, in doctrines which it is their duty carefully to examine, and not blindly, with an implicit faith, to swallow. Others, employing their thoughts only about some few things, grow acquainted sufficiently with them, attain great degrees of knowledge in them, and are ignorant of all other, having never let their thoughts loose in the search of other inquiries. Thus : That the three angles of a triangle are equal to two right ones, is a truth as certain as any thing can be, and I think more evident than many of those propositions that go for principles ; and yet there are millions, however expert in other things, who know not this at all, because they never set their thoughts on work about such angles : And he that certainly knows this proposition, may yet be utterly ignorant of the truth of other propositions, in mathematics itself, which are as clear and evident as this ; because, in his search of those ma-

thematical truths, he stopped his thoughts short, and went not so far. The same may happen concerning the notions we have of the being of a Deity; for though there be no truth which a man may more evidently make out to himself than the existence of a God, yet he that shall content himself with things, as he finds them in this world, as they minister to his pleasures and passions, and not make inquiry a little farther into their causes, ends, and admirable contrivances, and pursue the thoughts thereof with diligence and attention, may live long without any notion of such a Being. And if any person hath by talk put such a notion into his head, he may perhaps believe it; but if he hath never *examined* it, his knowledge of it will be no perfecter than his, who having been told that the three angles of a triangle are equal to two right ones, takes it upon trust, without examining the demonstration, and may yield his assent as a probable opinion, but hath no knowledge of the truth of it; which yet his faculties, if carefully employed, were able to make clear and evident to him. But this only by the by, to show how much our *knowledge depends upon the right use of those powers nature hath bestowed upon us*, and how little upon such innate principles, as are in vain supposed to be in all mankind for their direction; which all men could not but know if they were there, or else they would be there to no purpose: And which since all men do not know, nor can distinguish from other adventitious truths, we may well conclude there are no such.

§ 23. *Men must think and know for themselves.*

WHAT censure, doubting thus of innate principles, may deserve from men who will be apt to call it pulling up the old foundations of knowledge and certainty, I cannot tell; I persuade myself at least, that the way I have pursued, being conformable to truth, lays those foundations surer. This I am certain, I have not made it my business either to quit or follow any authority in the ensuing discourse: Truth has been my only aim, and wherever that has appeared to lead, my thoughts have impartially followed, without minding whether the

footsteps of any other lay that way or no. Not that I want a due respect to other men's opinions ; but, after all, the *greatest reverence is due to truth* : and I hope it will not be thought arrogance to say, that perhaps we should make greater progress in the discovery of rational and contemplative *knowledge*, if we *sought* it in the fountain, *in the consideration of things themselves*, and made use rather of our own thoughts than other men's, to find it : For I think we may as rationally hope to see with other men's eyes, as to know by other men's understandings. So much as we ourselves consider and comprehend of truth and reason, so much we possess of real and true knowledge. The floating of other men's opinions in our brains, makes us not one jot the more knowing though they happen to be true. What in them was science, is in us but opiniatry ; whilst we give up our assent only to reverend names, and do not, as they did, employ our own reason to *understand* those *truths* which gave them reputation. Aristotle was certainly a knowing man ; but no body ever thought him so, because he blindly embraced, and confidently vented, the opinions of another. And if the taking up of another's principles, without examining them, made not him a philosopher, I suppose it *will* hardly make any body else so. In the sciences every one has so much as he really knows and comprehends : What he believes only, and takes upon trust are but shreds ; which, however, will in the whole piece make no considerable addition to his stock who gathers them. Such borrowed wealth, like fairy-money, though it were gold in the hand from which he received it, will be but leaves and dust when it comes to use.

§ 24. *Whence the Opinion of Innate Principles.*

WHEN men have found some general propositions, that could not be doubted of as soon as understood, it was, I know, a *short and easy way to conclude them innate*. This being once received, it eased the lazy from the pains of search, and stopped the inquiry of the doubtful concerning all that was once styled innate. And it was of no small advantage to those who affected to be mas-

ters and teachers, to make this the principle of *principles*, That principles must not be questioned; for having once established this tenet, that there are innate principles, it put their followers upon a necessity of receiving some doctrines as such; which was to take them off from the use of their own reason and judgment, and put them on believing and taking them upon trust, without farther examination: In which posture of blind credulity, they might be more easily governed by, and made useful to some sort of men, who had the skill and office to principle and guide them. Nor is it a small power it gives one man over another, to have the authority to be the dictator of principles, and teacher of unquestionable truths, and to make a man swallow that for an innate principle, which may serve to his purpose who teaches them; whereas, had they examined the ways whereby men came to the knowledge of many universal truths, they would have found them to result in the minds of men from the being of things themselves, when duly considered; and that they were discovered by the application of those faculties that were fitted by nature to receive and judge of them, when duly employed about them.

§ 25. Conclusion.

To show how the understanding proceeds herein, is the design of the following discourse; which I shall proceed to, when I have first premised, that hitherto, to clear my way to those foundations which I conceive are the only true ones whereon to establish those notions we can have of our own knowledge, it hath been necessary for me to give an account of the reasons I had to doubt of innate principles. And since the arguments which are against them do some of them rise from common received opinions, I have been forced to take several things for granted, which is hardly avoidable to any one whose task it is to show the falsehood or improbability of any tenet; it happening in controversial discourses, as it does in the assaulting of towns, where, if the ground be but firm whereon the batteries are erected, there is no far-

ther inquiry of whom it is borrowed, nor whom it belongs to, so it affords but a fit rise for the present purpose. But in the future part of this discourse, designing to raise an edifice uniform, and consistent with itself, as far as my own experience and observation will assist me, I hope to erect it on such a basis, that I shall not need to shore it up with props and buttresses, leaning on borrowed or begged foundations; or at least, if mine prove a castle in the air, I will endeavour it shall be all of a piece, and hang together. Wherein I warn the reader not to expect undeniable cogent demonstrations, unless I may be allowed the privilege, not seldom assumed by others, to take my principles for granted; and then, I doubt not but I can demonstrate too. All that I shall say for the principles I proceed on is, that I can only *appeal* to men's own unprejudiced *experience* and observation, whether they be true or no; and this is enough for a man who professes no more than to lay down candidly and freely his own conjectures concerning a subject lying somewhat in the dark, without any other design than an unbiassed inquiry after truth.

BOOK II.—CHAPTER I.

OF IDEAS IN GENERAL, AND THEIR ORIGINAL.

§ 1. *Idea is the Object of thinking.*

EVERY man being conscious to himself that he thinks, and that which his mind is applied about whilst thinking, being the *ideas* that are there, it is past doubt, that men have in their minds several *ideas*, such as are those expressed by the words *whiteness*, *hardness*, *sweetness*, *thinking*, *motion*, *man*, *elephant*, *army*, *drunkennes*, and others. It is, in the first place then,

to be inquired, how he comes by them? I know it is a received doctrine, that men have native *ideas* and original characters stamped upon their minds in their very first being. This opinion I have at large examined already; and, I suppose, what I have said in the foregoing book will be much more easily admitted, when I have shown whence the understanding may get all the *ideas* it has, and by what ways and degrees they may come into the mind; for which I shall appeal to every one's own observation and experience.

§ 2. *All Ideas come from Sensation or Reflection.*

LET us then suppose the mind to be, as we say, white paper, void of all characters, without any *ideas*; how comes it to be furnished? Whence comes it by that vast store which the busy and boundless fancy of man has painted on it, with an almost endless variety? Whence has it all the materials of reason and knowledge? To this I answer, in one word, from *experience*: in that all our knowledge is founded, and from that it ultimately derives itself. Our observation employed either about *external sensible objects*, or about the *internal operations of our minds*, perceived and reflected on by ourselves, is that which supplies our understandings with materials of thinking. These two are the fountains of knowledge, from whence all the *ideas* we have, or can naturally have, do spring.

§ 3. *The Objects of Sensation one Source of Ideas.*

FIRST, Our *senses*, conversant about particular sensible objects, do convey into the mind several distinct *perceptions* of things, according to those various ways wherein those objects do affect them: And thus we come by those *ideas* we have of *yellow, white, heat, cold, soft, hard, bitter, sweet*, and all those which we call sensible qualities; which when I say the senses convey into the mind, I mean, they from external objects convey into the mind what produces there those *perceptions*. This great source of most of the *ideas* we have, depending wholly upon our senses, and derived by them to the understanding, I call *SENSATION*.

§ 4. *The Operations of our Minds the other Source of them.*

SECONDLY, The other fountain from which experience furnisheth the understanding with *ideas*, is the *perception of the operations of our own mind* within us, as it is employed about the ideas it has got; which operations, when the soul comes to reflect on and consider, do furnish the understanding with another set of *ideas*, which could not be had from things without; and such are *perception, thinking, doubting, believing, reasoning, knowing, willing*, and all the different actings of our own minds; which we being conscious of, and observing in ourselves, do from these receive into our understandings as distinct *ideas*, as we do from bodies affecting our senses. This source of *ideas* every man has wholly in himself: and though it be not sense as having nothing to do with external objects, yet it is very like it, and might properly enough be called internal sense. But as I call the other *Sensation*, so I call this *REFLECTION*, the ideas it affords being such only as the mind gets by reflecting on its own operations within itself. By *REFLECTION*, then, in the following part of this discourse, I would be understood to mean, that notice which the mind takes of its own operations, and the manner of them; by reason whereof there come to be *ideas* of these operations in the understanding. These two, I say, viz. external material things, as the objects of *SENSATION*, and the operations of our minds within, as the objects of *REFLECTION*, are to me the only originals from whence all our *ideas* take their beginnings. The term *operations* here I use in a large sense, as comprehending not barely the actions of the mind about its *ideas*, but some sort of passions arising sometimes from them; such as is the satisfaction or uneasiness arising from any thought.

§ 5. *All our Ideas are of the one or other of these.*
THE understanding seems to me not to have the least glimmering of any *ideas*, which it doth not receive from one of these two. *External objects furnish the mind with the ideas of sensible qualities*, which are all those dif-

ferent perceptions they produce in us: And the *mind furnishes the understanding with ideas of its own operations.*

These, when we have taken a full survey of them, and their several modes, combinations, and relations, we shall find to contain all our whole stock of *ideas*; and that we have nothing in our minds which did not come in one of these two ways. Let any one examine his own thoughts, and thoroughly search into his understanding, and then let him tell me whether all the original *ideas* he has there are any other than of the objects of his *senses*, or of the operations of his mind, considered as objects of his *reflection*: And how great a mass of knowledge soever he imagines to be lodged there, he will, upon taking a strict view, see that he has *not any idea in his mind, but what one of these two have imprinted*; though perhaps with infinite variety compounded and enlarged by the understanding; as we shall see hereafter.

§ 6. *Observable in Children.*

HE that attentively considers the state of a *child*, at his first coming into the world, will have little reason to think him stored with plenty of *ideas*, that are to be the matter of his future knowledge: It is by degrees he comes to be furnished with them. And though the *ideas* of obvious and familiar qualities imprint themselves before the memory begins to keep a register of time and order; yet it is often so late before some unusual qualities come in the way, that there are few men that cannot recollect the beginning of their acquaintance with them: And if it were worth while, no doubt a child might be so ordered, as to have but a very few even of the ordinary *ideas*, till he were grown up to a man. But all that are born into the world being surrounded with bodies that perpetually and diversly affect them; variety of *ideas*, whether care be taken about it or no, are imprinted on the minds of children. *Light* and *colours* are busy at hand every where, when the eye is but open: *Sounds*, and some *tangible qualities*, fail not to solicit their proper senses, and force an entrance to the

mind; but yet, I think, it will be granted easily, that if a child were kept in a place where he never saw any other but black and white, till he were a man, he would have no more *ideas* of scarlet or green, than he that from his childhood never tasted an oyster or a pine-apple, has of those particular relishes.

§ 7. *Men are differently furnished with these, according to the different Objects they converse with.*

MEN then come to be furnished with fewer or more simple *ideas* from without, according as the *objects* they converse with, afford greater or less variety; and from the operations of their minds within, according as they more or less *reflect* on them. For though he that contemplates the operations of his mind cannot but have plain and clear *ideas* of them; yet, unless he turn his thoughts that way, and considers them *attentively*, he will no more have clear and distinct *ideas* of all the *operations of his mind*, and all that may be observed therein, than he will have all the particular *ideas* of any landscape, or of the parts and motions of a clock, who will not turn his eyes to it, and with attention heed all the parts of it. The picture or clock may be so placed, that they may come in his way every day; but yet he will have but a confused *idea* of all the parts they are made up of, till he *applies himself with attention* to consider them each in particular.

§ 8. *Ideas of Reflection later, because they need Attention.*

AND hence we see the reason, why it is pretty late before most children get *ideas* of the operations of their own minds; and some have not any very clear or perfect *ideas* of the greatest part of them all their lives: because, though they pass there continually, yet, like floating visions, they make not deep impressions enough to leave in the mind clear, distinct, lasting *ideas*, till the understanding turns inwards upon itself, *reflects* on its own *operations*, and makes them the object of its own contemplation. Children, when they come first into it, are surrounded with a world of new things, which, by a constant solicitation of their senses, draw

the mind constantly to them, forward to take notice of new, and apt to be delighted with the variety of changing objects. Thus, the first years are usually employed and diverted in looking abroad. Men's business in them is to acquaint themselves with what is to be found without; and so, growing up in a constant attention to outward sensations, seldom make any considerable reflection on what passes within them, till they come to be of riper years; and some scarce ever at all.

§ 9. *The soul begins to have Ideas, when it begins to perceive.*

To ask *at what time a man has first any ideas*, is to ask when he begins to perceive; having *ideas*, and perception, being the same thing. I know it is an opinion, that the soul always thinks, and that it has the actual perception of *ideas* in itself constantly as long as it exists; and that actual thinking is as inseparable from the soul as actual extension is from the body: which, if true, to inquire after the beginning of a man's *ideas*, is the same as to inquire after the beginning of his soul. For, by this account, soul and its *ideas*, as body and its extension, will begin to exist both at the same time.

§ 10. *The Soul thinks not always; for this wants Proofs.*

BUT whether the soul be supposed to exist antecedent to, or coeval with, or some time after, the first rudiments or organization, or the beginnings of life in the body, I leave to be disputed by those who have better thought of that matter. I confess myself to have one of those dull souls, that doth not perceive itself always to contemplate *ideas*; nor can conceive it any more necessary for the *soul always to think*, than for the body always to move; the perception of *ideas* being (as I conceive) to the soul, what motion is to the body; not its essence, but one of its operations. And therefore, though thinking be supposed ever so much the proper action of the soul, yet it is not necessary to suppose that it should be always thinking, always in action: That, perhaps, is the privilege of the infinite Author and Preserver of things, *who never slumbers nor sleeps*; but

is not competent to any finite being, at least not to the soul of man. We know certainly by experience, that we sometimes think, and thence draw this infallible consequence, That there is something in us that has a power to think: But whether that substance perpetually thinks or no, we can be no farther assured than experience informs us. For to say that actual thinking is essential to the soul, and inseparable from it, is to beg what is in question, and not to prove it by reason; which is necessary to be done, if it be not a self-evident proposition. But whether this, *That the soul always thinks*, be a self-evident proposition that every body assents to at first hearing, I appeal to mankind. It is doubted, whether I thought all last night or no; the question being about a matter of fact, it is begging it, to bring as a proof for it, an hypothesis, which is the very thing in dispute; by which way one may prove any thing: and it is but supposing that all watches, whilst the balance beats, think; and it is sufficiently proved, and past doubt, that my watch thought all last night. But he that would not deceive himself, ought to build his hypothesis on matter of fact, and make it out by sensible experience, and not presume on matter of fact, because of his hypothesis; that is, because he supposes it to be so: which way of proving amounts to this, that I must necessarily think all last night, because another supposes I always think, though I myself cannot perceive that I always do so.

But men, in love with their opinions, may not only suppose what is in question, but allege wrong matter of fact. How else could any one make it an *inference* of mine, *that a thing is not, because we are not sensible of it in our sleep*? I do not say there is no soul in a man, because he is not sensible of it in his sleep: But I do say, he cannot think at any time, waking or sleeping, without being sensible of it. Our being sensible of it, is not necessary to any thing, but to our thoughts; and to them it is, and to them it will always be necessary, till we can think without being conscious of it.

§ 11. *It is not always conscious of it.*

I GRANT that the soul in a waking man is never without thought, because it is the condition of being awake: but whether sleeping, without dreaming, be not an affection of the whole man, mind as well as body, may be worth a waking man's consideration; it being hard to conceive, that any thing should think, and not be conscious of it. If the *soul* doth *think in a sleeping man*, without being conscious of it; I ask, whether, during such thinking, it has any pleasure or pain, or be capable of happiness or misery? I am sure the man is not, no more than the bed or earth he lies on. For to be happy or miserable, without being conscious of it, seems to me utterly inconsistent and impossible. Or if it be possible that the soul can, whilst the body is sleeping, have its thinking, enjoyments and concerns, its pleasure or pain apart, which the man is not conscious of, or partakes in; it is certain that Socrates asleep and Socrates awake is not the same person: but his soul when he sleeps, and Socrates the man, consisting of body and soul when he is waking, are two persons; since waking Socrates has no knowledge of, or concernment for that happiness or misery of his soul which it enjoys alone by itself whilst he sleeps, without perceiving any thing of it; no more than he has for the happiness or misery of a man in the Indies, whom he knows not. For if we take wholly away all consciousness of our actions and sensations, especially of pleasure and pain, and the concernment that accompanies it, it will be hard to know wherein to place personal identity.

§ 12. *If a sleeping Man thinks without knowing it, the sleeping and waking Man are two Persons.*

THE soul, during sound sleep, thinks, say these men. *Whilst it thinks and perceives*, it is capable certainly of those of delight or trouble, as well as any other perceptions; and it *must necessarily be conscious of its own perceptions*. But it has all this apart; the sleeping man, it is plain, is conscious of nothing of all this. Let us suppose then the soul of Castor, while he is sleeping,

retired from his body; which is no impossible supposition for the men I have here to do with, who so liberally allow life, without a thinking soul, to all other animals: These men cannot then judge it impossible, or a contradiction, that the body should live without the soul; nor that the soul should subsist and think, or have perception, even perception of happiness or misery, without the body. Let us then, as I say, suppose the soul of Castor separated, during his sleep, from his body, to think apart. Let us suppose too, that it chooses for its scene of thinking, the body of another man, *v. g.* Pollux, who is sleeping without a soul: For if Castor's soul can think, whilst Castor is asleep, what Castor is never conscious of, it is no matter what place it chooses to think in. We have here then the bodies of two men with only one soul between them, which we will suppose to sleep and wake by turns; and the soul still thinking in the waking man, whereof the sleeping man is never conscious, has never the least perception. I ask then, Whether Castor and Pollux, thus with only one soul between them, which thinks and perceives in one what the other is never conscious of, nor is concerned for, are not two as distinct persons as Castor and Hercules, or as Socrates and Plato were? And whether one of them might not be very happy, and the other very miserable? Just by the same reason they make the soul and the man two persons, who make the soul think apart what the man is not conscious of. For I suppose nobody will make identity of persons to consist in the soul's being united to the very same numerical particles of matter; for if that be necessary to identity, it will be impossible in that constant flux of the particles of our bodies, that any man should be the same person two days or two moments together.

§ 13. *Impossible to convince those that sleep without dreaming, that they think.*

THUS, methinks, every drowsy nod shakes their doctrine, who teach, that the soul is always thinking. Those at least who do at any time *sleep without dreaming*, can never be convinced that their thoughts are

sometimes for four hours busy, without their knowing of it; and if they are taken in the very act, waked in the middle of that sleeping contemplation, can give no manner of account of it.

§ 14. *That men dream without remembering it, in vain urged.*

It will perhaps be said, that the *soul thinks* even in the soundest sleep, but the memory retains it not. That the soul in a sleeping man should be this moment busy a-thinking, and the next moment in a waking man, not remember nor be able to recollect one jot of all those thoughts, is very hard to be conceived, and would need some better proof than bare assertion to make it be believed. For who can without any more ado, but being barely told so, imagine, that the greatest part of men do, during all their lives, for several hours every day, think of something, which if they were asked, even in the middle of these thoughts, they could remember nothing at all of? Most men, I think, pass a great part of their sleep without dreaming. I once knew a man that was bred a scholar, and had no bad memory, who told me, he had never dreamed in his life till he had that fever he was then newly recovered of, which was about the five or six and twentieth year of his age. I suppose the world affords more such instances: At least every one's acquaintance will furnish him with examples enough of such as pass most of their nights without dreaming.

§ 15. *Upon this hypothesis the Thoughts of a sleeping Man ought to be most rational.*

To think often, and never to retain it so much as one moment, is a very useless sort of thinking: And the soul, in such a state of thinking, does very little, if at all, excel that of a looking-glass, which constantly receives variety of images, or *ideas*, but retains none; they disappear and vanish, and there remain no footsteps of them; the looking-glass is never the better for such *ideas*, nor the soul for such thoughts. Perhaps it will be said, that in a waking man the materials of the body are employed, and made use of, in thinking; and that the memory of thoughts is retained by the impressions.

that are made on the brain, and the traces there left after such thinking; but that in the *thinking of the soul*, which is not perceived in a *sleeping man*, there the soul thinks apart, and *making no use of the organs of the body, leaves no impressions on it, and consequently no memory of such thoughts.* Not to mention again the absurdity of two distinct persons, which follows from this supposition, I answer farther, That whatever *ideas* the mind can receive and contemplate without the help of the body, it is reasonable to conclude, it can retain without the help of the body too: or else the soul, or any separate spirit, will have but little advantage by thinking. If it has no memory of its own thoughts; if it cannot lay them up for its use, and be able to recall them upon occasion: if it cannot reflect upon what is past, and make use of its former experiences, reasonings, and contemplations, to what purpose does it think? They, who make the soul a thinking thing, at this rate, will not make it a much more noble being than those do whom they condemn, for allowing it to be nothing but the subtlest parts of matter. Characters drawn on dust, that the first breath of wind effaces; or impressions made on a heap of atoms, or animal spirits, are altogether as useful, and render the subject as noble as the thoughts of a soul that perish in thinking; that once out of sight, are gone for ever, and leave no memory of themselves behind them. Nature never makes excellent things for mean or no uses: And it is hardly to be conceived, that our infinitely wise Creator should make so admirable a faculty as the power of thinking, that faculty which comes nearest the excellency of his own incomprehensible Being, to be so idly and uselessly employed, at least a fourth part of its time here, as to think constantly, without remembering any of those thoughts, without doing any good to itself or others, or being any way useful to any other part of the creation. If we will examine it, we shall not find, I suppose, the motion of dull and senseless matter any where in the universe made so little use of, and so wholly thrown away.

§ 16. *On this Hypothesis the Soul must have Ideas not derived from Sensation or Reflection, of which there is no Appearance.*

It is true, we have sometimes instances of perception, whilst we are *asleep*, and retain the memory of those *thoughts* : But how *extravagant* and incoherent for the most part they are ; how little conformable to the perfection and order of a rational being, those who are acquainted with dreams need not be told. This I would willingly be satisfied in, whether the soul, when it thinks thus apart, and as it were separate from the body, acts less rationally than when conjointly with it or no ? If its separate thoughts be less rational, then these men must say, that the soul owes the perfection of rational thinking to the body : If it does not, it is a wonder that our dreams should be, for the most part, so frivolous and irrational ; and that the soul should retain none of its more rational soliloquies and meditations.

§ 17. *If I think when I know it not, nobody else can know it.*

THOSE who so confidently tell us that the soul always actually thinks, I would they would also tell us what those *ideas* are that are in the soul of a child before, or just at the union with the body, before it hath received any by *sensation* ? The *dreams* of sleeping men are, as I take it, all *made up of the waking man's ideas*, though for the most part oddly put together. It is strange, if the soul has *ideas* of its own, that it derived not from *sensation* or *reflection* (as it must have, if it thought before it received any impression from the body) that it should never, in its private thinking (so private, that the man himself perceives it not) retain any of them; the very moment it wakes out of them, and then make the man glad with new discoveries. Who can find it reasonable, that the soul should, in its retirement, during sleep, have so many hours thoughts, and yet never light on any of those *ideas* it borrowed not from *sensation* or *reflection* ; or, at least, preserve the memory of none but such, which being occasioned from

the body, must needs be less natural to a spirit? It is strange the soul should never once in a man's whole life recal over any of its pure native thoughts, and those *ideas* it had, before it borrowed any thing from the body; never bringing into the waking man's view any other *ideas* but what have a tang of the cask, and manifestly derive their original from that union. If it always thinks, and so had *ideas* before it was united, or before it received any from the body, it is not to be supposed, but that during sleep it recollects its native *ideas*; and during that retirement from communicating with the body, whilst it thinks by itself, the *ideas* it is busied about should be, sometimes at least, those more natural and congenial ones, which it had in itself underived from the body, or its own operations about them; which, since the waking man never remembers, we must from this hypothesis conclude, either that the soul remembers something that the man does not; or else that memory belongs only to such *ideas* as are derived from the body, or the mind's operations about them.

§ 18. *How knows any one that the Soul always thinks? For if it be not a self-evident Proposition, it needs Proof.*

I WOULD be glad also to learn from these men, who so confidently pronounce, that the human soul, or, which is all one, that a man always thinks, how they come to know it; nay, *how they come to know that they themselves think, when they themselves do not perceive it?* This, I am afraid, is to be sure without proofs; and to know without perceiving: It is, I suspect, a confused notion, taken up to serve an hypothesis; and none of those clear truths that either their own evidence forces us to admit, or common experience makes it impudence to deny. For the most that can be said of it is, that it is possible the soul may always think, but not always retain it in memory: And, I say, it is as possible that the soul may not always think; and much more probable that it should sometimes not think, than that it should often think, and that a long while together, and

not be conscious to itself the next moment after, that it had thought.

§ 19. *That a Man should be busy in thinking, and yet not retain it the next moment, very improbable.*

To suppose the soul to think, and the man not to perceive it, is, as has been said, to make two persons in one man: And if one considers well these men's way of speaking, one should be led into a suspicion that they must do so. For they who tell us that the soul always thinks, do never, that I remember, say, that a man always thinks. Can the soul think, and not the man? or a man think, and not be conscious of it? This, perhaps, would be suspected of jargon in others. If they say, the man thinks always, but is not always conscious of it; they may as well say, his body is extended without having parts. For it is altogether as intelligible to say, that a body is extended without parts, as that any thing *thinks without being conscious of it*, or perceiving that it does so. They who talk thus, may with as much reason, if it be necessary to their hypothesis, say, that a man is always hungry, but that he does not always feel it; whereas hunger consists in that very sensation, as thinking consists in being conscious that one thinks. If they say, that a man is always conscious to himself of thinking; I ask, how they know it? Consciousness is the perception of what passes in a man's own mind. Can another man perceive that I am conscious of any thing, when I perceive it not myself? No man's knowledge here can go beyond his experience. Wake a man out of a sound sleep, and ask him, What he was that moment thinking on? If he himself be conscious of nothing he then thought on, he must be a notable diviner of thoughts, that can assure him that he was thinking: May he not with more reason assure him he was not asleep? This is something beyond philosophy; and it cannot be less than revelation that discovers to another thoughts in my mind, when I can find none there myself: And they must needs have a penetrating sight, who can certainly see that I think, when I cannot perceive it myself, and when I declare that I do.

not; and yet can see that dogs or elephants do not think, when they give all the demonstration of it imaginable, except only telling us that they do so. This some may suspect to be a step beyond the *Rosencrucians*; it seeming easier to make one's self invisible to others, than to make another's thoughts visible to me, which are not visible to himself. But it is but defining the soul to be a substance that always thinks, and the business is done. If such definition be of any authority, I know not what it can serve for, but to make many men suspect that they have no souls at all, since they find a good part of their lives pass away without thinking. For no definitions, that I know, no suppositions of any sect, are of force enough to destroy constant experience; and perhaps it is the affectation of knowing beyond what we perceive, that makes so much useless dispute and noise in the world.

§ 20. *No Ideas but from Sensation or Reflection, evident, if we observe Children.*

I SEE no reason therefore to believe, that the *soul thinks before the senses have furnished it with ideas* to think on; and as those are increased and retained, so it comes, by exercise, to improve its faculty of thinking, in the several parts of it, as well as afterwards, by compounding those *ideas*, and reflecting on its own operations; it increases its stock, as well as facility, in remembering, imagining, reasoning, and other modes of thinking.

§ 21.

HE that will suffer himself to be informed by observation and experience, and not make his own hypothesis the rule of nature, will find few signs of a soul accustomed to much thinking in a new-born child, and much fewer of any reasoning at all. And yet it is hard to imagine, that the rational soul should think so much, and not reason at all. And he that will consider, that infants, newly come into the world, spend the greatest part of their time in sleep, and are seldom awake, but when either hunger calls for the teat, or some pain (the most importunate of all sensations), or some other violent impression upon the body, forces the mind to per-

ceive, and attend to it: He, I say, who considers this, will perhaps find reason to imagine, that a *fœtus in the mother's womb differs not much from the state of a vegetable*; but passes the greatest part of its time, without perception or thought, doing very little but sleep in a place where it needs not seek for food, and is surrounded with liquor, always equally soft, and near of the same temper; where the eyes have no light, and the ears so shut up, are not very susceptible of sounds; and where there is little or no variety, or change of objects, to move the senses.

§ 22.

FOLLOW a *child* from its birth, and observe the alterations that time makes, and you shall find, as the mind by the senses comes more and more to be furnished with *ideas*, it comes to be more and more awake; thinks more, the more it has matter to think on. After some time, it begins to know the objects, which being most familiar with it, have made lasting impressions. Thus it comes by degrees to know the persons it daily converses with, and distinguish them from strangers; which are instances and effects of its coming to retain and distinguish the *ideas* the senses convey to it. And so we may observe how the mind, *by degrees*, improves in these, and advances to the exercise of those other faculties of *enlarging, compounding, and abstracting* its *ideas*, and of reasoning about them, and reflecting upon all these; of which I shall have occasion to speak more hereafter.

§ 23.

IF it shall be demanded then, *When a man begins to have any ideas?* I think the true answer is, When he first has any *sensation*. For since there appear not to be any *ideas* in the mind, before the senses have conveyed any in, I conceive that *ideas* in the understanding are coeval with *sensation*; which is such an impression or motion, made in some part of the body, as produces some perception in the understanding. It is about these impressions made on our senses by outward objects, that the mind seems first to employ itself in such operations

as we call *perception, remembering, consideration, reasoning, &c.*

§ 24. *The Original of all our Knowledge.*

IN time, the mind comes to reflect on its own *operations* about the *ideas* got by *sensation*, and thereby stores itself with a new set of *ideas*, which I call *ideas of reflection*. These are the *impressions* that are made on our *senses*, by outward objects that are extrinsical to the mind; and *its own operations*, proceeding from powers intrinsical and proper to itself, which when reflected on by itself, become also objects of its contemplation, are, as I have said, *the original of all knowledge*. Thus the first capacity of human intellect is, that the mind is fitted to receive the impressions made on it; either through the senses by outward objects, or by its own operations when it *reflects* on them. This is the first step a man makes towards the discovery of any thing, and the groundwork whereon to build all those notions, which ever he shall have naturally in this world. All those sublime thoughts, which tower above the clouds, and reach as high as heaven itself, take their rise and footing here: In all that great extent wherein the mind wanders, in those remote speculations it may seem to be elevated with, it stirs not one jot beyond those *ideas* which *sense* or *reflection* have offered for its contemplation.

§ 25. *In the Reception of simple Ideas, the Understanding is for the most part passive.*

IN this part, the *understanding* is merely *passive*; and whether or no it will have these beginnings, and as it were materials of knowledge, is not in its own power. For the objects of our senses do, many of them, obtrude their particular *ideas* upon our minds whether we will or no: and the operations of our minds will not let us be without at least some obscure notions of them. No man can be wholly ignorant of what he does when he thinks. These *simple ideas*, when offered to the mind, the *understanding* can no more refuse to have, nor alter, when they are imprinted, nor blot them out, and make new ones itself, than a mirror can refuse,

alter, or obliterate the images or *ideas* which the objects set before it do therein produce. As the bodies that surround us do diversly affect our organs, the mind is forced to receive the impressions, and cannot avoid the perception of those *ideas* that are annexed to them.

CHAP. II.

OF SIMPLE IDEAS.

§ 1. *Uncompounded Appearances.*

THE better to understand the nature, manner, and extent of our knowledge, one thing is carefully to be observed concerning the *ideas* we have, and that is, that *some* of them are *simple*, and *some* *complex*.

Though the qualities that affect our senses are, in the things themselves, so united and blended, that there is no separation, no distance between them; yet it is plain, the *ideas* they produce in the mind enter by the senses simple and unmixed. For though the sight and touch often take in from the same object, at the same time, different *ideas*; as a man sees at once motion and colour; the hand feels softness and warmth in the same piece of wax: Yet the simple *ideas*, thus united in the same subject, are as perfectly distinct as those that come in by different senses: The coldness and hardness which a man feels in a piece of *ice*, being as distinct *ideas* in the mind, as the smell and whiteness of a lily; or as the taste of sugar, and smell of a rose. And there is nothing can be plainer to a man, than the clear and distinct perceptions he has of those simple *ideas*; which being each in itself uncompounded, contains in it nothing but *one uniform appearance*, or conception in the mind, and is not distinguishable into different *ideas*.

§ 2. *The Mind can neither make nor destroy them.*

THESE simple *ideas*, the materials of all our knowledge, are suggested and furnished to the mind only by those two ways above mentioned, viz. *sensation* and *reflection*. When the understanding is once stored with these simple

ideas, it has the power to repeat, compare, and unite them, even to an almost infinite variety; and so can make at pleasure new complex ideas. But it is not in the power of the most exalted wit, or enlarged understanding, by any quickness or variety of thoughts, to *invent or frame one new simple idea* in the mind, not taken in by the ways aforementioned: Nor can any force of the understanding *destroy* those that are there. The dominion of man, in this little world of his own understanding, being much-what the same as it is in the great world of visible things; wherein his power, however managed by art and skill, reaches no farther than to compound and divide the materials that are made to his hand; but can do nothing towards the making the least particle of new matter, or destroying one atom of what is already in being. The same inability will every one find in himself, who shall go about to fashion in his understanding any simple *idea*, not received in by his senses from external objects, or by reflection from the operations of his own mind about them. I would have any one try to fancy any taste which had never affected his palate; or frame the *idea* of a scent he had never smelt: and when he can do this, I will also conclude, that a blind man hath *ideas* of colours, and a deaf man true distinct notions of sounds.

§ 3.

THIS is the reason why, though we cannot believe it impossible to God to make a creature with other organs, and more ways to convey into the understanding the notice of corporeal things than those five, as they are usually counted, which he has given to man: yet I think it is *not possible* for any one to *imagine* any other *qualities* in bodies, howsoever constituted, whereby they can be taken notice of, besides sounds, tastes, smells, visible and tangible qualities. And had mankind been made with but four senses, the qualities then, which are the objects of the fifth sense, had been as far from our notice, imagination, and conception, as now any *belonging to a sixth, seventh, or eighth sense*, can possibly be: which, whether yet some other creatures, in some other parts

of this vast and stupendous universe, may not have, will be a great presumption to deny. He that will not set himself proudly at the top of all things, but will consider the immensity of this fabric, and the great variety that is to be found in this little and inconsiderable part of it which he has to do with, may be apt to think, that in other mansions of it there may be other and different intelligent beings, of whose faculties he has as little knowledge or apprehension, as a worm shut up in one drawer of a cabinet hath of the senses or understanding of a man; such variety and excellency being suitable to the wisdom and power of the Maker. I have here followed the common opinion of man's having but five senses; though perhaps there may be justly counted more; but either supposition serves equally to my present purpose.

CHAP. III.

OF IDEAS OF ONE SENSE.

§ 1. Division of Simple Ideas.

THE better to conceive the *ideas* we receive from sensation, it may not be amiss for us to consider them, in reference to the different ways whereby they make their approaches to our minds, and make themselves perceivable by us.

First, then, There are some which come into our minds *by one sense only*.

Secondly, There are others that convey themselves into the mind *by more senses than one*.

Thirdly, Others that are had from *reflection only*.

Fourthly, There are some that make themselves way, and are suggested to the mind *by all the ways of sensation and reflection*.

We shall consider them apart under these several heads. *Ideas of one Sense, as Colours, of Seeing, Sound, of Hearing, &c.*

FIRST, There are *some ideas which have admittance only through one sense*, which is peculiarly adapted to receive them. Thus light and colours, as white, red, yellow,

blue, with their several degrees or shades, and mixtures, as green, scarlet, purple, sea-green, and the rest; come in only by the eyes: All kind of noises, sounds, and tones, only by the ears: The several tastes and smells, by the nose and palate. And if these organs, or the nerves, which are the conduits to convey them from without to their audience in the brain, the mind's presence-room (as I may call it), are any of them so disordered, as not to perform their functions, they have no postern to be admitted by; no other way to bring themselves into view, and be perceived by the understanding.

The most considerable of those belonging to the touch, are heat and cold, and solidity; all the rest consisting almost wholly in the sensible configuration, as smooth and rough; or else more or less firm adhesion of the parts, as hard and soft, tough and brittle, are obvious enough.

§ 2. *Few Simple Ideas have Names.*

I THINK, it will be needless to enumerate all the particular *simple ideas*, belonging to each sense. Nor indeed is it possible, if we would: there being a great many more of them belonging to most of the senses, than we have names for. The variety of smells, which are as many almost, if not more, than species of bodies in the world, do most of them want names. *Sweet* and *stinking* commonly serve our turn for these *ideas*, which in effect is little more than to call them pleasing or displeasing; though the smell of a rose and violet, both sweet, are certainly very distinct *ideas*. Nor are the different tastes that by our palates we receive *ideas* of, much better provided with names. Sweet, bitter, sour, harsh, and salt, are almost all the epithets we have to denominate that numberless variety of relishes, which are to be found distinct, not only in almost every sort of creatures, but in the different parts of the same plant, fruit, or animal. The same may be said of colours and sounds. I shall therefore, in the account of simple *ideas* I am here giving, content myself to set down only such, as are most material to our present purpose, or are in

themselves less apt to be taken notice of, though they are very frequently the ingredients of our complex *ideas*, amongst which, I think, I may well account solidity; which therefore I shall treat of in the next chapter.

CHAP. IV.

OF SOLIDITY.

§ 1. *We receive this Idea from Touch.*

THE *idea* of *solidity* we receive by our touch; and it arises from the resistance which we find in body, to the entrance of any other body into the place it possesses, till it has left it. There is no *idea*, which we receive more constantly from sensation, than *solidity*. Whether we move or rest, in what posture soever we are, we always feel something under us that supports us, and hinders our farther sinking downwards; and the bodies which we daily handle, make us perceive, that whilst they remain between them, they do by an insurmountable force hinder the approach of the parts of our hands that press them. That which thus hinders the approach of two bodies, when they are moving one towards another, I call *solidity*. I will not dispute, whether this acceptation of the word *solid* be nearer to its original signification, than that which mathematicians use it in; it suffices, that I think the common notion of *solidity* will allow, if not justify, this use of it; but if any one think it better to call it *impenetrability*, he has my consent. Only I have thought the term *solidity* the more proper to express this *idea*, not only because of its vulgar use in that sense; but also because it carries something more of positive in it than *impenetrability*, which is negative, and is perhaps more a consequence of *solidity* than *solidity* itself. This of all other, seems the *idea* most intimately connected with and essential to body; so as nowhere else to be found or imagined, but only in matter. And, though our senses take no notice of it, but in masses of matter, of a bulk sufficient to cause a sensation in us; yet the mind, having once got this *idea* from such grosser sensible bodies, traces it farther; and considers it, as well as figure

in the minutest particle of matter that can exist: and finds it inseparably inherent in body, wherever or how-ever modified.

§ 2. *Solidity fills Space.*

THIS is the *idea* belongs to body, whereby we conceive it to *fill space*. The *idea* of which filling of space, is, that where we imagine any space taken up by a solid substance, we conceive it so to possess it, that it excludes all other solid substances; and will for ever hinder any two other bodies, that move towards one another in a straight line, from coming to touch one another, unless it removes from between them, in a line not parallel to that which they move in. This *idea* of it, the bodies which we ordinarily handle, sufficiently furnish us with.

§ 3. *Distinct from Space.*

THIS resistance, whereby it keeps other bodies out of the space which it possesses, is so great, that no force, how great soever, can surmount it. All the bodies in the world pressing a drop of water on all sides, will never be able to overcome the resistance which it will make, as soft as it is, to their approaching one another, till it be removed out of their way; whereby our *idea* of *solidity* is distinguished both from pure space, which is capable neither of resistance nor motion; and from the ordinary *idea* of *hardness*. For a man may conceive two bodies at a distance, so as they may approach one another, without touching or displacing any solid thing, till their superficies come to meet: whereby, I think, we have the clear *idea* of space without *solidity*. For (not to go so far as annihilation of any particular body) I ask, whether a man cannot have the *idea* of the motion of one single body alone, without any other succeeding immediately into its place? I think, it is evident he can: the *idea* of motion in one body no more including the *idea* of motion in another, than the *idea* of a square figure in one body includes the *idea* of a square figure in another. I do not ask, whether bodies do so exist, that the motion of one body cannot really be without the motion of another. To determine this either way, is to beg the question for or against a *vacuum*. But my question is, whether one cannot have the *idea* of one

body moved, whilst others are at rest? and I think, this no one will deny. If so, then the place it deserted gives us the *idea* of pure space without solidity, whereinto another body may enter, without either resistance or protrusion of any thing. When the sucker in a pump is drawn, the space it filled in the tube is certainly the same, whether any other body follows the motion of the sucker or no: nor does it imply a contradiction, that upon the motion of one body, another, that is only contiguous to it, should not follow it. The necessity of such a motion is built only on the supposition that the word is full, but not on the distinct *ideas* of space and solidity; which are as different as resistance and not resistance, protrusion and not protrusion. And that men have *ideas* of space without body, their very disputes about a *vacuum* plainly demonstrate; as is showed in another place.

§ 4. *From Hardness.*

SOLIDITY is hereby also *differentiated from hardness*, in that solidity consists in repletion, and so an utter exclusion of other bodies out of the space it possesses; but hardness, in a firm cohesion of the parts of matter, making up masses of a sensible bulk, so that the whole does not easily change its figure. And indeed hard and soft are names that we give to things, only in relation to the constitutions of our own bodies; that being generally called hard by us, which will put us to pain, sooner than change figure by the pressure of any part of our bodies; and that, on the contrary, soft, which changes the situation of its parts upon an easy and unpainful touch.

But this difficulty of changing the situation of the sensible parts amongst themselves, or of the figure of the whole, gives no more solidity to the hardest body in the world, than to the softest; nor is an adamant one jot more solid than water. For though the two flat sides of two pieces of marble will more easily approach each other, between which there is nothing but water or air, than if there be a diamond between them: yet it is not that the parts of the diamond are more solid than those

of water or resist more ; but because the parts of water being more easily separable from each other, they will by a side-motion be more easily removed, and give way to the approach of the two pieces of marble. But if they could be kept from making place, by that side-motion they would eternally hinder the approach of these two pieces of marble, as much as the diamond ; and it would be as impossible by any force to surmount their resistance, as to surmount the resistance of the parts of a diamond. The softest body in the world will as invincibly resist the coming together of any two other bodies, if it be not put out of the way, but remain between them, as the hardest that can be found or imagined. He that shall fill a yielding soft body well with air or water, will quickly find its resistance : And he that thinks that nothing but bodies that are hard can keep his hands from approaching one another, may be pleased to make a trial, with the air enclosed in a football. The experiment, I have been told, was made at Florence with a hollow globe of gold filled with water, and exactly closed, farther shows the solidity of so soft a body as water. For the golden globe thus filled being put into a press, which was driven by the extreme force of screws, the water made itself way through the pores of that very close metal ; and finding no room for a nearer approach of its particles within, got to the outside, where it rose like a dew, and so fell in drops, before the sides of the globe could be made to yield to the violent compression of the engine that squeezed it.

§ 5. *On Solidity depends Impulse, Resistance, and Protrusion.*

By this *idea* of solidity, is the extension of body distinguished from the extension of space : The extension of body being nothing but the cohesion or continuity of solid, separable, moveable parts ; and the extension of space, the continuity of unsolid, inseparable, and immoveable parts. *Upon the solidity of body also depends their mutual impulse, resistance, and protrusion.* Of pure space, then, and solidity, there are several (amongst which I confess myself one) who persuade themselves

they have clear and distinct *ideas* : and that they can think on space, without any thing in it that resists, or is protruded by body. This is the *idea* of pure space, which they think they have as clear as any *idea* they can have of the extension of body ; the *idea* of the distance between the opposite parts of a concave superficies, being equally as clear without as with the *idea* of any solid parts between : And, on the other side, they persuade themselves, that they have, distinct from that of pure space, the *idea* of something that fills space, that can be protruded by the impulse of other bodies, or resist their motion. If there be others that have not these two *ideas* distinct, but confound them, and make but one of them, I know not how men, who have the same *idea* under different names, or different *ideas* under the same name, can in that case talk with one another ; any more than a man, who, not being blind or deaf, has distinct *ideas* of the colour of scarlet, and the sound of a trumpet, could discourse concerning scarlet colour with the blind man I mentioned in another place, who fancied that the *idea* of scarlet was like the sound of a trumpet.

§ 6. *What it is.*

If any one asks me, *What this solidity is* ? I send him to his senses to inform him : Let him put a flint or a foot-ball between his hands, and then endeavour to join them, and he will know. If he thinks this not a sufficient explication of solidity, what it is, and wherein it consists ; I promise to tell him what it is, and wherein it consists, when he tells me what thinking is, or wherein it consists ; or explains to me what extension or motion is, which perhaps seems much easier. The simple *ideas* we have, are such as experience teaches them us ; but if beyond that, we endeavour by words to make them clearer in the mind, we shall succeed no better than if we went about to clear up the darkness of a blind man's mind by talking ; and to discourse unto him the *ideas* of light and colours. The reason of this I shall show in another place.

CHAP. V.

OF SIMPLE IDEAS OF DIVERS SENSES.

THE *ideas* we get by more than one sense, are of *space*, or *extension*, *figure*, *rest*, and *motion*; for these make perceivable impressions, both on the eyes and touch: And we can receive and convey into our minds the *ideas* of the extension, figure, motion, and rest of bodies, both by seeing and feeling. But having occasion to speak more at large of these in another place, I here only enumerate them.

CHAP. VI.

OF SIMPLE IDEAS OF REFLECTION.

§ 1. *Simple Ideas are the Operations of the Mind about its other Ideas.*

THE mind receiving the *ideas* mentioned in the foregoing chapters, from without, when it turns its view inward upon itself, and observes its own actions about those *ideas* it has, takes from thence other *ideas*, which are as capable to be the objects of its contemplation as any of those it received from foreign things.

§ 2. *The Idea of Perception, and Idea of Willing, we have from Reflection.*

THE two great and principal actions of the mind, which are most frequently considered, and which are so frequent, that every one that pleases may take notice of them in himself, are these two:

*Perception, or thinking, and
Volition, or willing.*

The power of thinking is called the *understanding*; and the power of volition is called the *will*; and these two powers or abilities in the mind are denominated *faculties*. Of some of the modes of these simple *ideas* of reflection,

such as are *remembrance, discerning, reasoning, judging, knowledge, faith, &c.* I shall have occasion to speak hereafter.

CHAP. VII.

OF SIMPLE IDEAS OF BOTH SENSATION AND REFLECTION.

§ 1.

THERE be other simple *ideas* which convey themselves into the mind by all the ways of sensation and reflection, viz.

Pleasure, or delight, and its opposite.

Pain, or uneasiness.

Power.

Existence.

Unity.

§ 2. *Pleasure and Pain.*

DELIGHT, or *uneasiness*, one or other of them, join themselves to almost all our *ideas*, both of sensation and reflection: And there is scarce any affection of our senses from without, any retired thought of our mind within, which is not able to produce in us *pleasure* or *pain*. By *pleasure* and *pain* I would be understood to signify whatsoever delights or molests us; whether it arises from the thoughts of our minds, or any thing operating on our bodies. For whether we call it satisfaction, delight, pleasure, happiness, &c. on the one side; or uneasiness, trouble, pain, torment, anguish, misery, &c. on the other; they are still but different degrees of the same thing, and belong to the *ideas* of *pleasure* and *pain*, delight or uneasiness; which are names I shall most commonly use for those two sorts of *ideas*.

§ 3.

THE infinitely wise Author of our being having given us the power over several parts of our bodies, to move or keep them at rest as we think fit; and also, by the motion of them, to move ourselves and other contiguous bodies, in which consist all the actions of our body: Having also given a power to our minds in several in-

stances, to choose, among its *ideas*, which it will think on, and to pursue the inquiry of this or that subject with consideration and attention, to excite us to these actions of thinking and motion that we are capable of; has been pleased to join to several thoughts and several sensations, a *perception of delight*. If this were wholly separated from all our outward sensations and inward thoughts, we should have no reason to prefer one thought or action to another; negligence to attention; or motion to rest. And so we should neither stir our bodies, nor employ our minds, but let our thoughts (if I may so call it) run adrift, without any direction or design; and suffer the *ideas* of our minds, like unregarded shadows, to make their appearances there, as it happened, without attending to them. In which state man, however furnished with the faculties of understanding and will, would be a very idle inactive creature, and pass his time only in a lazy lethargic dream. It has therefore pleased our wise Creator to annex to several objects, and to the *ideas* which we receive from them, as also to several of our thoughts, a concomitant pleasure, and that in several objects, to several degrees; that those faculties which he had endued us with, might not remain wholly idle and unemployed by us.

§ 4.

PAIN has the same efficacy and use to set us on work that pleasure has, we being as ready to employ our faculties to avoid that, as to pursue this: Only this is worth our consideration, that *pain is often produced by the same objects and ideas that produce pleasure* in us. This their near conjunction, which makes us often feel pain in the sensations where we expected pleasure, gives us new occasion of admiring the wisdom and goodness of our Maker; who designing the preservation of our being, has annexed pain to the application of many things to our bodies, to warn us of the harm that they will do, and as advices to withdraw from them. But he not designing our preservation barely, but the preservation of every part and organ in its perfection, hath, in many cases, annexed pain to those very *ideas* which

delight us. Thus heat, that is very agreeable to us in one degree, by a little greater increase of it, proves no ordinary torment; and the most pleasant of all sensible objects, light itself, if there be too much of it, if increased beyond a due proportion to our eyes, causes a very painful sensation. Which is wisely and favourably so ordered by nature, that when any object does, by the vehemency of its operation, disorder the instruments of sensation, whose structures cannot but be very nice and delicate, we might by the pain be warned to withdraw before the organ be quite put out of order, and so be unfitted for its proper functions for the future. The consideration of those objects that produce it, may well persuade us that this is the end or use of pain. For though great light be insufferable to our eyes, yet the highest degree of darkness does not at all diseased them; because that causing no disorderly motion in it, leaves that curious organ unharmed in its natural state. But yet excess of cold, as well as heat, pains us, because it is equally destructive to that temper which is necessary to the preservation of life, and the exercise of the several functions of the body, and which consists in a moderate degree of warmth; or if you please, a motion of the insensible parts of our bodies confined within certain bounds.

§ 5.

BEYOND all this, we may find another reason, *why* God hath scattered up and down *several degrees of pleasure and pain, in all the things that environ and affect us*, and blended them together in almost all that our thoughts and senses have to do with; that we, finding imperfection, dissatisfaction, and want of complete happiness, in all the enjoyments which the creatures can afford us, might be led to seek it in the enjoyment of him, *with whom there is fulness of joy, and at whose right hand are pleasures for evermore.*

§ 6.

THOUGH what I have here said may not perhaps make the *ideas of pleasure and pain* clearer to us than our own experience does, which is the only way that we are capable

of having them; yet the consideration of the reason why they are annexed to so many other *ideas*, serving to give us due sentiments of the wisdom and goodness of the Sovereign Disposer of all things, may not be unsuitable to the main end of these inquiries: The knowledge and veneration of him being the chief end of all our thoughts, and the proper business of all our understandings.

§ 7. *Existence and Unity.*

EXISTENCE and *unity* are two other *ideas* that are suggested to the understanding by every object without, and every *idea* within. When *ideas* are in our minds, we consider them as being actually there, as well as we consider things to be actually without us; which is, that they exist, or have *existence*: And whatever we can consider as one thing, whether a real being or *idea*, suggests to the understanding the *idea* of *unity*.

§ 8. *Power.*

POWER also is another of those simple *ideas* which we receive from *sensation and reflection*. For observing in ourselves, that we can at pleasure move several parts of our bodies which were at rest; the effects also that natural bodies are able to produce in one another, occurring every moment to our senses, we both these ways get the *idea* of *power*.

§ 9. *Succeſſion.*

BESIDES these, there is another *idea*, which, though suggested by our senses, yet is more constantly offered us by what passes in our own minds; and that is, the *idea* of *succeſſion*. For if we look immediately into ourselves, and reflect on what is observable there, we shall find our *ideas* always whilst we are awake, or have any thought, passing in train, one going and another coming, without intermission.

§ 10. *Simple Ideas the Materials of all our knowledge.* THESE, if they are not all, are at least (as I think) the most considerable of those *simple ideas* which the mind has, and out of which is made all its other knowledge; all which it receives only by the two forementioned ways of *sensation and reflection*. Nor let any one think these

too narrow bounds for the capacious mind of man to expatiate in, which takes its flight farther than the stars, and cannot be confined by the limits of the world; that extends its thoughts often even beyond the utmost expansion of matter, and makes excursions into that incomprehensible *inane*. I grant all this, but desire any one to assign any *simple idea* which is not *received from one of those inlets* before mentioned, or any *complex idea* not made out of *those simple ones*. Nor will it be so strange to think these few *simple ideas* sufficient to employ the quickest thought, or largest capacity; and to furnish the materials of all that various knowledge, and more various fancies and opinions of all mankind, if we consider how many words may be made out of the various composition of twenty-four letters; or if, going one step farther, we will but reflect on the variety of combinations may be made, with barely one of the above-mentioned *ideas*, viz. number, whose stock is inexhaustible, and truly infinite: And what a large and immense field doth extension alone afford the mathematicians?

CHAP. VIII.

SOME FARTHER CONSIDERATIONS CONCERNING OUR
SIMPLE IDEAS.§ 1. *Positive Ideas from privative Causes.*

CONCERNING the *simple ideas* of sensation, it is to be considered, that whatsoever is so constituted in nature, as to be able, by affecting our senses, to cause any perception in the mind, doth thereby produce in the understanding a *simple idea*; which, whatever be the external cause of it, when it comes to be taken notice of by our discerning faculty, it is by the mind looked on and considered there to be a real *positive idea* in the understanding, as much as any other whatsoever: though perhaps the cause of it be but a privation in the subject.

§ 2.

THUS the *ideas* of heat and cold, light and darkness, white and black, motion and rest, are equally clear and *positive ideas* in the mind; though perhaps some of the *causes* which produce them are barely *privations* in those subjects from whence our senses derive those *ideas*. These the understanding, in its view of them, considers all as distinct *positive ideas*, without taking notice of the causes that produce them; which is an inquiry not belonging to the *idea*, as it is in the understanding, but to the nature of the things existing without us. These are two very different things, and carefully to be distinguished; it being one thing to perceive and know the *idea* of white or black, and quite another to examine what kind of particles they must be, and how ranged in the superficies, to make any object appear white or black.

§ 3.

A PAINTER or dyer who never inquired into their causes, hath the *ideas* of white and black, and other colours, as clearly, perfectly, and distinctly in his understanding, and perhaps more distinctly, than the philosopher who hath busied himself in considering their natures, and thinks he knows how far either of them is in its cause positive or privative; and the *idea of black* is no less *positive* in his mind than that of white, *however the cause* of that colour in the external object may be only a *privation*.

§ 4.

IF it were the design of my present undertaking, to inquire into the natural causes and manner of perception, I should offer this as a reason *why a privative cause might*, in some cases at least, *produce a positive idea*; viz. That all sensation being produced in us only by different degrees and modes of motion in our animal spirits variously agitated by external objects, the abatement of any former motion must as necessarily produce a new sensation, as the variation or increase of it; and so introduce a new *idea*, which depends only on a different motion of the animal spirits in that organ.

§ 5.

BUT whether this be so or no, I will not here determine, but appeal to every one's own experience, whether the shadow of a man, though it consists of nothing but the absence of light (and the more the absence of light is, the more discernible is the shadow), does not, when a man looks on it, cause as clear and positive an *idea* in his mind, as a man himself, though covered over with clear sun-shine? And the picture of a shadow is a positive thing. Indeed we have *negative names*, which stand not directly for positive *ideas*, but for their absence, such as *insipid, silence, nihil, &c.*; which words denote positive *ideas*; v. g. *taste, sound, being*, with a signification of their absence.

§ 6. *Positive Ideas from privative Causes.*

AND thus one may truly be said to see darkness. For, supposing a hole perfectly dark, from whence no light is reflected, it is certain one may see the figure of it, or it may be painted; or whether the ink I write with makes any other *idea*, is a question. The privative causes I have here assigned of positive *ideas*, are according to the common opinion; but in truth it will be hard to determine, whether there be really any *ideas* from a privative cause, till it be determined, *whether rest be any more a privation than motion.*

§ 7. *Ideas in the Mind, Qualities in Bodies.*

To discover the nature of our *ideas* the better, and to discourse of them intelligibly, it will be convenient to distinguish them as they are *ideas* or perceptions in our minds, and as they are modifications of matter in the bodies that cause such perceptions in us; that so we may not think (as perhaps usually is done) that they are exactly the images and *resemblances* of something inherent in the subject; most of those of sensation being in the mind no more the likeness of something existing without us, than the names that stand for them are the likeness of our *ideas*, which yet upon hearing they are apt to excite in us.

§ 8.

WHATSOEVER the mind perceives in itself, or is the im-

mediate object of perception thought, or understanding, that I call *idea*; and the power to produce any *idea* in our mind, I call *quality* of the subject wherein that power is. Thus a snow-ball having the power to produce in us the *ideas* of *white*, *cold*, and *round*, the powers to produce those *ideas* in us, as they are in the snow-ball, I call *qualities*; and as they are sensations or perceptions in our understandings, I call them *ideas*: which *ideas*, if I speak of sometimes, as in the things themselves, I would be understood to mean those qualities in the objects which produce them in us.

§ 9. *Primary Qualities.*

QUALITIES thus considered in bodies are, first, such as are utterly inseparable from the body, in what estate soever it be; such as in all the alterations and changes it suffers, all the force can be used upon it, it constantly keeps; and such as sense constantly finds in every particle of matter which has bulk enough to be perceived, and the mind finds inseparable from every particle of matter, though less than to make itself singly be perceived by our senses, *v. g.* Take a grain of wheat, divide it into two parts, each part has still *solidity*, *extension*, *figure*, and *mobility*; divide it again, and it retains still the same qualities; and so divide it on, till the parts become insensible, they must retain still each of them all those qualities. For division (which is all that a mill, or pestle, or any other body, does upon another, in reducing it to insensible parts) can never take away either solidity, extension, figure, or mobility, from any body, but only makes two or more distinct separate masses of matter, of that which was but one before; all which distinct masses, reckoned as so many distinct bodies, after division make a certain number. These I call *original* or *primary qualities* of body, which I think we may observe to produce simple *ideas* in us, *viz.* solidity, extension, figure, motion, or rest, and number.

§ 10.

2dly, SUCH *qualities* which in truth are nothing in the objects themselves, but powers to produce various sen-

fations in us by their *primary qualities*, i. e. by the bulk, figure, texture, and motion of their insensible parts, as colours, sounds, tastes, &c. these I call *secondary qualities*. To these might be added a third sort, which are allowed to be barely powers, though they are as much real qualities in the subject, as those which I, to comply with the common way of speaking, call *qualities*, but, for distinction, *secondary qualities*. For the power in fire to produce a new colour, or consistency in wax or clay by its primary qualities, is as much a quality in fire, as the power it has to produce in me a new *idea* or sensation of warmth or burning, which I felt not before by the same primary qualities, viz. the bulk, texture, and motion of its insensible parts.

§ 11. *How primary Qualities produce their Ideas.*

THE next thing to be considered, is, How *bodies* produce *ideas* in us; and that is manifestly *by impulse*, the only way which we can conceive bodies operate in.

§ 12.

IF, then, external objects be not united to our minds, when they produce *ideas* in it, and yet we perceive *these original qualities* in such of them as singly fall under our senses: it is evident, that some motion must be thence continued by our nerves or animal spirits, by some parts of our bodies, to the brain, or the seat of sensation, there to *produce in our minds the particular ideas we have of them*. And since the extension, figure, number, and motion of bodies of an observable bigness, may be perceived at a distance *by the sight*, it is evident some singly imperceptible bodies must come from them to the eyes, and thereby convey to the brain some *motion*, which produces these *ideas* which we have of them in us.

§ 13. *How Secondary.*

AFTER the same manner that the *ideas* of these original qualities are produced in us, we may conceive, that the *ideas of secondary qualities* are also produced, viz. *by the operation of insensible particles on our senses*. For it being manifest, that there are bodies, and good store of bodies, each whereof are so small, that we cannot, by any of our senses, discover either their bulk, figure, or mo-

tion ; as is evident in the particles of the air and water, and other extremely smaller than those, perhaps as much smaller than the particles of air or water, as the particles of air or water are smaller than pease or hailstones: Let us suppose at present, that the different motions and figures, bulk and number, of such particles, affecting the several organs of our senses, produce in us those different sensations which we have from the colours and smells of bodies ; v. g. that a violet, by the impulse of such insensible particles of matter of peculiar figures and bulks, and in different degrees and modifications of their motions, causes the *ideas* of the blue colour, and sweet scent of that flower to be produced in our minds ; it being no more impossible to conceive that God should annex such *ideas* to such motions, with which they have no similitude, than that he should annex the *idea* of pain to the motion of a piece of steel dividing our flesh, with which that *idea* hath no resemblance.

§ 14.

WHAT I have said concerning *colours* and *smells*, may be understood also of *tastes* and *sounds*, and other the like *sensible qualities* ; which, whatever reality we, by mistake, attribute to them, are in truth nothing in the objects themselves, but powers to produce various sensations in us, and depend on those *primary qualities*, viz. bulk, figure, texture, and motion of parts ; as I have said.

§ 15. *Ideas of primary Qualities are Resemblances ; of secondary, not.*

FROM whence I think it is easy to draw this observation, that the *ideas of primary qualities* of bodies are *resemblances* of them, and their patterns do really exist in the bodies themselves ; but the *ideas*, produced in us by these *secondary qualities*, have no resemblance of them at all. There is nothing like our *ideas* existing in the bodies themselves. They are in the bodies, we denominate from them only a power to produce those sensations in us : And what is sweet, blue, or warm in *idea*, is but the certain bulk, figure, and motion of the insensible parts in the bodies themselves, which we call so.

§ 16.

FLAME is denominated *hot* and *light*; *snow*, *white*, and *cold*; and *manna*, *white*, and *sweet*; from the *ideas* they produce in us: Which qualities are commonly thought to be the same in those bodies that those *ideas* are in us, the one the perfect resemblance of the other, as they are in a mirror; and it would by most men be judged very extravagant, if one should say otherwise. And yet he that will consider, that *the same fire* that at one distance *produces* in us the sensation of *warmth*, does at a nearer approach produce in us the far different sensation of *pain*, ought to bethink himself what reason he has to say, that his *idea* of *warmth*, which was produced in him by the fire, is actually *in the fire*; and his *idea* of *pain*, which the same fire produced in him the same way, is *not* in the fire. Why is *whiteness* and *coldness* in *snow*, and *pain* not, when it produces the one and the other *idea* in us: and can do neither, but by the bulk, figure, number, and motion of its solid parts?

§ 17.

THE particular *bulk*, *number*, *figure*, and *motion* of the parts of *fire*, or *snow*, are really in them, whether any one's senses perceive them or no; and therefore they may be called *real qualities*, because they really exist in those bodies: But *light*, *heat*, *whiteness*, or *coldness*, are no more really in them, than *sickness* or *pain* is in *manna*. Take away the sensation of them; let not the eyes see light or colours, nor the ears hear sounds; let the palate not taste, nor the nose smell; and all colours, tastes, odours, and sounds, as they are such particular *ideas*, vanish and cease, and are reduced to their causes, *i. e.* bulk, figure, and motion of parts.

§ 18.

A PIECE of *manna* of a sensible bulk, is able to produce in us the *idea* of a round or square figure; and by being removed from one place to another, the *idea* of motion. This *idea* of motion represents it, as it really is in the *manna* moving: A circle or square are the same, whether in *idea* or existence, in the mind, or in the

manna ; and this both *motion and figure* are really in the *manna*, whether we take notice of them or no : This every body is ready to agree to. Besides, *manna*, by the bulk, figure, texture and motion of its parts, has a power to produce the sensations of sickness, and sometimes of acute pains or gripings in us. That these *ideas* of *sickness and pain* are not in the *manna*, but effects of its operations on us, and are no where when we feel them not : This also every one readily agrees to. And yet men are hardly to be brought to think, that *sweetness and whiteness* are not really in *manna* ; which are but the effects of the operations of *manna*, by the motion, size and figure of its particles on the eyes and palate ; as the pain and sickness caused by *manna*, are confessedly nothing but the effects of its operations on the stomach and guts, by the size, motion and figure of its insensible parts (for by nothing else can a body operate, as has been proved) : As if it could not operate on the eyes and palate, and thereby produce in the mind particular distinct *ideas*, which in itself it has not as well as we allow it can operate on the guts and stomach, and thereby produce distinct *ideas*, which in itself it has not. These *ideas* being all effects of the operations of *manna*, on several parts of our bodies, by the size, figure, number and motion of its parts ; why those produced by the eyes and palate should rather be thought to be really in the *manna*, than those produced by the stomach and guts ; or why the pain and sickness, *ideas*, that are the effects of *manna*, should be thought to be no where when they are not felt ; and yet the sweetness and whiteness, effects of the same *manna* on other parts of the body, by ways equally as unknown, should be thought to exist in the *manna*, when they are not seen nor tasted, would need some reason to explain.

§ 19. *Ideas of primary Qualities, are Resemblances, of secondary, not.*

LET us consider the red and white colours in *porphyre* : hinder light but from striking on it, and its colours vanish, it no longer produces any such *ideas* in us ; upon the return of light, it produces these appearances on us

again. Can any one think any real alterations are made in the *porphyre*, by the presence or absence of light; and that those *ideas* of whiteness and redness, are really in *porphyre* in the light, when it is plain it has no colour in the dark? it has, indeed, such a configuration of particles, both night and day, as are apt by the rays of light rebounding from some parts of that hard stone, to produce in us the *idea* of redness, and from others, the *idea* of whiteness; but whiteness or redness are not in it at any time, but such a texture, that hath the power to produce such a sensation in us.

§. 20.

POUND an almond, and the clear white colour will be altered into a dirty one, and the sweet taste into an oily one. What real alteration can the beating of the pestle make in any body, but an alteration of the texture of it?

§. 21.

IDEAS being thus distinguished and understood, we may be able to give an account how the same water, at the same time, may produce the *idea* of cold by one hand, and of heat by the other; whereas it is impossible that the same water, if those *ideas* were really in it, should at the same time be both hot and cold: for if we imagine warmth, as it is in our hands, to be nothing but a certain sort and degree of motion in the minute particles of our nerves, or animal spirits, we may understand how it is possible that the same water may, at the same time, produce the sensation of heat in one hand, and cold in the other; which yet figure never does, that never producing the *idea* of a square by one hand, which has produced the *idea* of a globe by another. But if the sensation of heat and cold be nothing but the increase or diminution of the motion of the minute parts of our bodies, caused by the corpuscles of any other body, it is easy to be understood, that if that motion be greater in one hand than in the other; if a body be applied to the two hands, which has, in its minute particles a greater motion, than in those of one of the hands, and a less than in those of the other; it will increase the motion of the one

hand, and lessen it in the other, and so cause the different sensations of heat and cold that depend thereon.

§ 22.

I HAVE, in what just goes before, been engaged in physical inquiries a little farther than perhaps I intended. But it being necessary to make the nature of sensation a little understood, and to make the *difference between the qualities in bodies, in the ideas produced by them in the mind*, to be distinctly conceived, without which it were impossible to discourse intelligibly of them; I hope I shall be pardoned this little excursion into natural philosophy, it being necessary in our present inquiry to distinguish the *primary* and *real qualities* of bodies, which are always in them (*viz.* solidity, extension, figure, number, and motion, or rest, and are sometimes perceived by us, *viz.* when the bodies they are in are big enough singly to be discerned), from those *secondary* and *imputed qualities*, which are but the powers of several combinations of those primary ones, when they operate, without being distinctly discerned; whereby we also may come to know what *ideas* are, and what are not resemblances of something really existing in the bodies we denominate from them.

§ 23. *Three sorts of Qualities in Bodies.*

THE *qualities* then that are in *bodies*, rightly considered, are of *three sorts*.

First, The *bulk, figure, number, situation, and motion, or rest* of their solid parts; those are in them, whether we perceive them or no; and when they are of that size that we can discover them, we have by these an *idea* of the thing as it is in itself, as is plain in artificial things. These I call *primary qualities*.

Secondly, The *power* that is in any body, by reason of its insensible *primary qualities*, to operate after a peculiar manner on any of our senses, and thereby produce in us the *different ideas* of several colours, sounds, smells, tastes, &c. These are usually called sensible qualities.

Thirdly, The *power* that is in any body, by reason of the particular constitution of its *primary qualities*, to

make such a *change* in the *bulk, figure, texture, and motion of another body*, as to make it operate on our senses differently from what it did before. Thus the sun has a power to make wax white, and fire to make lead fluid. These are usually called powers.

The first of these, as has been said, I think, may be properly called *real, original, or primary qualities*, because they are in the things themselves, whether they are perceived or no; and upon their different modifications it is, that the secondary qualities depend.

The other two are only powers to act differently upon other things, which powers result from the different modifications of those primary qualities.

§ 24. *The first are Resemblances. The second thought Resemblances, but are not. The third neither are, nor are thought so.*

BUT though *these two latter sorts of qualities are powers barely*, and nothing but powers relating to several other bodies, and resulting from the different modifications of the original qualities; yet they are generally otherwise thought of. For the *second sort, viz.* The powers to produce several *ideas* in us by our senses, are looked upon as *real qualities, in the things*, thus affecting us: But the *third sort are called, and esteemed barely powers, v. g.* the *idea* of heat or light, which we receive by our eyes or touch from the sun, are commonly thought *real qualities*, existing in the sun, and something more than mere powers in it. But when we consider the sun, in reference to wax, which it melts or blanches, we look on the whiteness and softness produced in the wax, not as qualities in the sun, but effects produced by *powers* in it: Whereas, if rightly considered, these qualities of light and warmth, which are perceptions in me when I am warmed, or enlightened by the sun, are no otherwise in the sun, than the changes made in the wax, when it is blanched or melted, are in the sun. They are all of them equally powers in the sun, depending on its primary qualities, whereby it is able in the one case, so to alter the bulk, figure, texture, or motion of some of the insensible parts of my eyes or hands,

as thereby to produce in me the *idea* of light or heat; and in the other it is able so to alter the bulk, figure, texture, or motion of the insensible parts of the wax, as to make them fit to produce in me the distinct *ideas* of white and fluid.

§ 35.

THE reason *why the one are ordinarily taken for real qualities, and the other only for bare powers*, seems to be, because the *ideas* we have of distinct colours, sounds, &c. containing nothing at all in them of bulk, figure, or motion, we are not apt to think them the effects of these primary qualities, which appear not to our senses to operate in their production, and with which they have not any apparent congruity, or conceivable connection. Hence it is that we are so forward to imagine, that those *ideas* are the resemblances of something really existing in the objects themselves: Since sensation discovers nothing of bulk, figure, or motion of parts in their production; nor can reason show how bodies, by their bulk, figure, and motion, should produce in the mind the *ideas* of blue or yellow, &c. But in the other case, in the operations of bodies, changing the qualities one of another, we plainly discover, that the quality produced hath commonly no resemblance with any thing in the thing producing it; wherefore we look on it as a bare effect of power. For though receiving the *idea* of heat or light from the sun, we are apt to think it is a perception and resemblance of such a quality in the sun; yet when we see wax, or a fair face, receive change of colour from the sun, we cannot imagine, that to be the perception or resemblance of anything in the sun, because we find not those different colours in the sun itself. For our senses being able to observe a likeness or unlikeness of sensible qualities in two different external objects, we so forwardly enough conclude the production of any sensible quality in any subject, to be an effect of bare power, and not the communication of any quality, which was really in the efficient, when we find no such sensible quality in the thing that produced it. But our senses, not being able to discover any unlikeness between

the *idea* produced in us, and the quality of the object producing it, we are apt to imagine, that our *ideas* are resemblances of something in the objects, and not the effects of certain powers placed in the modification of their primary qualities; with which primary qualities the *ideas* produced in us have no resemblance.

§ 26. *Secondary Qualities twofold; First, immediately perceivable; Secondly, mediately perceivable.*

To conclude, besides those before mentioned *primary qualities* in bodies, viz. bulk, figure, extension, number, and motion of their solid parts: all the rest, whereby we take notice of bodies, and distinguish them one from another, are nothing else but several powers in them depending on those primary qualities; whereby they are fitted, either by immediately operating on our bodies, to produce several different *ideas* in us; or else by operating on other bodies, so to change their primary qualities, as to render them capable of producing *ideas* in us, different from what before they did. The former of these, I think, may be called *secondary qualities, immediately perceivable*: The latter, *secondary qualities, mediately perceivable*.

CHAP. IX.

OF PERCEPTION.

§ 1. *Perception the first simple Idea of Reflection.*

PERCEPTION, as it is the first faculty of the mind, exercised about our *ideas*; so it is the first and simplest *idea* we have from reflection, and is by some called thinking in general. Though thinking, in the propriety of the English tongue, signifies that sort of operation of the mind about its *ideas*, wherein the mind is active; where it, with some degree of voluntary attention, considers any thing. For in bare naked *perception*, the mind is, for the most part, only passive; and what it perceives, it cannot avoid perceiving.

§ 2. *Is only when the Mind receives the impression.*

WHAT perception is, every one will know better by reflecting on what he does himself, when he sees, hears,

feels, &c. or thinks, than by any discourse of mine. Whoever reflects on what passes in his own mind, cannot miss it : And if he does not reflect, all the words in the world cannot make him have any notion of it.

§ 3.

THIS is certain, that whatever alterations are made in the body, if they reach not the mind ; whatever impressions are made on the outward parts, if they are not taken notice of within ; there is no perception. Fire may burn our bodies, with no other effect than it does a billet, unless the motion be continued to the brain ; and there the sense of heat, or *idea* of pain, be produced in the mind, wherein consists *actual perception*.

§ 4.

How often may a man observe in himself, that whilst his mind is intently employed in the contemplation of some objects, and curiously surveying some *ideas* that are there ; it takes no notice of impressions of sounding bodies made upon the organ of hearing, with the same alteration that uses to be for the producing the *idea* of sound ? A sufficient impulse there may be on the organ ; but it not reaching the observation of the mind, there follows no perception : And though the motion that uses to produce the *idea* of sound, be made in the ear, yet no sound is heard. Want of sensation in this case, is not through any defect in the organ, or that the man's ears are less affected than at other times when he does hear : but that which uses to produce the *idea*, though conveyed in by the usual organ, not being taken notice of in the understanding, and so imprinting no *idea* on the mind, there follows no sensation. So that wherever there is sense, or perception, there some *idea* is actually produced, and present in the understanding.

§ 5. *Children, though they have Ideas in the Womb, have none Innate.*

THEREFORE I doubt not but *children*, by the exercise of their senses about objects that affect them *in the womb*, receive some few *ideas* before they are born ; as the unavoidable effects, either of the bodies that environ them,

or else of those wants or diseases they suffer: Among which (if one may conjecture concerning things not very capable of examination), I think the *ideas* of hunger and warmth are two; which probably are some of the first that children have, and which they scarce ever part with again.

§ 6.

BUT though it be reasonable to imagine that *children* receive some *ideas* before they come into the world; yet these simple *ideas* are *far from* those *innate principles* which some contend for, and we above have rejected. These here mentioned being the effects of sensation, are only from some affections of the body, which happen to them there, and so depend on something exterior to the mind; no otherwise differing in their manner of production from other *ideas* derived from sense, but only in the precedency of time: Whereas those innate principles are supposed to be quite of another nature; not coming into the mind by any accidental alterations in, or operations on, the body; but, as it were, original characters impressed upon it, in the very first moment of its being and constitution.

§ 7. Which Ideas first, is not evident.

As there are some *ideas* which we may reasonably suppose may be introduced into the minds of children in the womb, subservient to the necessities of their life and being there; so after they are born, *those* ideas are the *earliest imprinted*, which happen to be the *sensible qualities which first occur* to them: Amongst which, light is not the least considerable, nor of the weakest efficacy. And how covetous the mind is to be furnished with all such *ideas* as have no pain accompanying them, may be a little guessed, by what is observable in children new-born, who always turn their eyes to that part from whence the light comes, lay them how you please. But the *ideas* that are most familiar at first being various, according to the divers circumstances of children's first entertainment in the world; the order wherein the several *ideas* come at first into the mind, is

very various and uncertain also ; neither is it much material to know it.

§ 8. *Ideas of Sensation often changed by the Judgment.*
 WE are farther to consider concerning perception, that the *ideas we receive by sensation are often* in grown people *altered by the judgment*, without our taking notice of it. When we set before our eyes a round globe, of any uniform colour, v. g. gold, alabaster, or jet ; it is certain that the *idea* thereby imprinted in our mind, is of a flat circle variously shadowed, with several degrees of light and brightness coming to our eyes. But we having by use been accustomed to perceive what kind of appearance convex bodies are wont to make in us, what alterations are made in the reflections of light by the difference of the sensible figures of bodies ; the judgment presently, by an habitual custom, alters the appearances into their causes : So that from that which truly is variety of shadow or colour, collecting the figure, it makes it pass for a mark of figure, and frames to itself the perception of a convex figure and an uniform colour ; when the *idea* we receive from thence is only a plane variously coloured, as is evident in painting. To which purpose I shall here insert a problem of that very ingenious and studious promoter of real knowledge, the learned and worthy Mr. Molineux, which he was pleased to send me in a letter some months since ; and it is this : *Suppose a man born blind, and now adult, and taught by his touch to distinguish between a cube and a sphere of the same metal, and nighly of the same bigness, so as to tell when he felt one and the other, which is the cube, which the sphere. Suppose then the cube and sphere placed on a table, and the blind man to be made to see : Query, Whether by his sight before he touched them, he could now distinguish and tell, which is the globe, which the cube ? To which the acute and judicious proposer answers : Not. *For though he has obtained the experience of, how a globe, how a cube affects his touch ; yet he has not yet attained the experience, that that which affects his touch so or so, must affect his sight so or so : Or that a protuberant angle in the cube, that pressed his hand unequally, shall ap-*

pear to his eye as it does in the cube. I agree with this thinking gentleman, whom I am proud to call my friend, in his answer to this his problem; and am of opinion, that the blind man, at first sight, would not be able with certainty to say which was the globe, which the cube, whilst he only saw them; though he could unerringly name them by his touch, and certainly distinguish them by the difference of their figure felt. This I have set down, and leave with my reader, as an occasion for him to consider how much he may be beholden to experience, improvement, and acquired notions, where he thinks he has not the least use of or help from them: And the rather, because this observing gentleman farther adds, That *having upon the occasion of my book, proposed this to divers very ingenious men, he hardly ever met with one that at first gave the answer to it which he thinks true, till by hearing his reasons they were convinced.*

§ 9.

BUT this is not, I think, usual in any of our *ideas*, but those received by *sight*: Because sight, the most comprehensive of all our senses, conveying to our minds the *ideas* of light and colours, which are peculiar only to that sense; and also the far different *ideas* of space, figure, and motion, the several varieties whereof change the appearances of its proper object, viz. light and colours; we bring ourselves by use to judge of the one by the other. This, in many cases, by a settled habit, in things whereof we have frequent experience, is performed so constantly and so quick, that we take that for the perception of our sensation, which is an *idea* formed by our judgment; so that one, viz. that of sensation, serves only to excite the other, and is scarce taken notice of itself: As a man who reads or hears with attention and understanding, takes little notice of the characters or sounds, but of the *ideas* that are excited in him by them.

§ 10.

NOR need we wonder that this is done with so little notice, if we consider how very *quick the actions of the mind* are performed: For as itself is thought to take up

no space, to have no extension; so its actions seem to require no time, but many of them seem to be crowded into an instant. I speak this in comparison to the actions of the body. Any one may easily observe this in his own thoughts, who will take the pains to reflect on them. How, as it were in an instant, do our minds with one glance see all the parts of a demonstration, which may very well be called a long one, if we consider the time it will require to put it into words, and step by step show it another; *Secondly*, We shall not be so much surpris'd, that this is done in us with so little notice, if we consider how the facility which we get of doing things, by a custom of doing, makes them often pass in us without our notice. *Habits*, especially such as are begun very early, come at last to produce actions in us, which often escape our observation. How frequently do we, in a day, cover our eyes with our eye-lids, without perceiving that we are at all in the dark? Men that by custom have got the use of a byword, do almost in every sentence pronounce sounds, which, though taken notice of by others, they themselves neither hear nor observe. And therefore it is not so strange that our mind should often change the idea of its sensation into that of its judgment, and make one serve only to excite the other without our taking notice of it.

§ 11. *Perception puts the Difference between Animals and inferior Beings.*

THIS faculty of perception seems to me to be that which puts the distinction betwixt the animal kingdom and the inferior parts of nature. For however vegetables have, many of them, some degrees of motion, and upon the different application of other bodies to them do very briskly alter their figure and motion, and so have obtained the name of sensitive plants, from a motion which has some resemblance to that which in animals follows upon sensation; yet, I suppose it is all bare mechanism; and no otherwise produced, than the turning of a wild oat-beard, by the insinuation of the particles of moisture; or the shortening of a rope, by the effusion of

water. All which is done without any sensation in the subject, or the having or receiving any *ideas*.

§ 12.

PERCEPTION, I believe, is in some degree in *all sorts of animals*; though in some, possibly, the avenues provided by nature for the reception of sensations are so few, and the perception they are received with so obscure and dull, that it comes extremely short of the quickness and variety of sensations which is in other animals: But yet it is sufficient for, and wisely adapted to, the state and condition of that sort of animals who are thus made. So that the wisdom and goodness of the Maker plainly appears in all the parts of this stupendous fabric, and all the several degrees and ranks of creatures in it.

§ 13.

WE may, I think, from the make of an oyster or cockle, reasonably conclude, that it has not so many, nor so quick senses as a man, or several other animals; nor if it had, would it, in that state and incapacity of transferring itself from one place to another, be bettered by them. What good would sight and hearing do to a creature that cannot move itself to or from the objects, wherein, at a distance it perceives good or evil? And would not quickness of sensation be an inconvenience to an animal that must lie still, where chance has once placed it; and there receive the afflux of colder or warmer, clean or foul water, as it happens to come to it?

§ 14.

BUT yet I cannot but think there is some small dull perception, whereby they are distinguished from perfect insensibility. And that this may be so, we have plain instances, even in mankind itself. Take one, in whom decrepid old age has blotted out the memory of his past knowledge, and clearly wiped out the *ideas* his mind was formerly stored with; and has, by destroying his sight, hearing, and smell, quite, and his taste to a great degree, stopped up almost all the passages for new ones to enter; Or, if there be some of the inlets yet

half open, the impressions made are scarce perceived; or not at all retained. How far such an one (notwithstanding all that is boasted of innate principles) is in his knowledge, and intellectual faculties, above the condition of a cockle or an oyster, I leave to be considered. And if a man had passed sixty years in such a state, as it is possible he might, as well as three days; I wonder what difference there would have been in any intellectual perfections, between him and the lowest degree of animals.

§ 15. *Perception the Inlet of Knowledge.*

PERCEPTION then being the first step and degree towards knowledge, and the inlet of all the materials of it; the fewer senses any man, as well as any other creature, hath; and the fewer and duller the impressions are that are made by them, and the duller the faculties are that are employed about them; the more remote are they from that knowledge which is to be found in some men. But this being in great variety of degrees (as may be perceived amongst men), cannot certainly be discovered in the several species of animals, much less in their particular individuals. It suffices me only to have remarked here, that perception is the first operation of all our intellectual faculties, and the inlet of all knowledge into our minds. And I am apt too to imagine that it is perception in the lowest degree of it, which puts the boundaries between animals and the inferior ranks of creatures. But this I mention only as my conjecture by the by; it being indifferent to the matter in hand, which way the the learned shall determine of it.

CHAP. X:

OF RETENTION.

§ 1. *Contemplation.*

THE next faculty of the mind, whereby it makes a farther progress towards knowledge, is that which I call *retention*, or the keeping of those simple ideas, which from sensation or reflection it hath received.

This is done two ways: First, by keeping the *idea*, which is brought into it, for some time actually in view; which is called *contemplation*.

§ 2. *Memory.*

THE other way of retention, is the power to revive again in our minds those *ideas*, which after imprinting have disappeared, or have been as it were laid aside out of sight: And thus we do, when we conceive heat or light, yellow or sweet, the object being removed. This is *memory*, which is as it were the storehouse of our *ideas*. For the narrow mind of man not being capable of having many *ideas* under view and consideration at once, it was necessary to have a repository to lay up those *ideas*, which at another time it might have use of. But our *ideas* being nothing but actual perceptions in the mind, which cease to be any thing when there is no perception of them, this *laying up* of our *ideas* in the repository of the memory, signifies no more but this, that the mind has a power in many cases to revive perceptions, which it has once had, with this additional perception annexed to them, that it has had them before. And in this sense it is, that our *ideas* are said to be in our memories, when indeed they are actually nowhere, but only there is an ability in the mind when it will to revive them again, and as it were paint them anew on itself, though some with more, some with less difficulty; some more lively, and others more obscurely. And thus it is, by the assistance of this faculty, that we are said to have all those *ideas* in our understandings, which, though we do not actually contemplate, yet we can bring in sight, and make appear again, and be the objects of our thoughts, without the help of those sensible qualities which first imprinted them there.

§ 3. *Attention, Repetition, Pleasure and Pain, fix Ideas.*

ATTENTION and *repetition* help much to the fixing any *ideas* in the *memory*: but those which naturally at first make the deepest and most lasting impression, are those which are accompanied with *pleasure or pain*.

The great business of the senses being to make us take notice of what hurts or advantages the body, it is wisely ordered by nature (as has been shown) that pain should accompany the reception of several *ideas*; which supplying the place of consideration and reasoning in children, and acting quicker than consideration in grown men, makes both the old and young avoid painful objects, with that haste which is necessary for their preservation: and in both settles in the memory a caution for the future.

§ 4. *Ideas fade in the Memory.*

CONCERNING the several *degrees* of lasting, wherewith *ideas* are imprinted on the *memory*, we may observe, that some of them have been produced in the understanding, by an object affecting the senses once only, and no more than once; others that have more than once offered themselves to the senses, have yet been little taken notice of: The mind either heedless, as in children, or otherwise employed, as in men, intent only on one thing, not settling the stamp deep into itself. And in some, where they are set on with care and repeated impressions, either through the temper of the body, or some other default, the memory is very weak. In all these cases, *ideas* in the mind quickly fade, and often vanish quite out of the understanding, leaving no more footsteps or remaining characters of themselves, than shadows do flying over fields of corn; and the mind is as void of them, as if they never had been there.

§ 5.

THUS many of those *ideas*, which were produced in the minds of children, in the beginning of their sensation (some of which perhaps, as of some pleasures and pains, were before they were born, and others in their infancy), if in the future course of their lives they are not repeated again, are quite lost, without the least glimpse remaining of them. This may be observed in those, who by some mischance have lost their sight when they were very young, in whom the *ideas* of colours, having been but slightly taken notice of,

and ceasing to be repeated, do quite wear out; so that some years after there is no more notion nor memory of colours left in their minds than in those of people born blind. The memory in some men, it is true, is very tenacious, even to a miracle; but yet there seems to be a constant decay of all our *ideas*, even of those which are struck deepest, and in ~~minds~~ the most retentive; so that if they be not sometimes renewed by repeated exercise of the senses, or reflection on those kinds of objects which at first occasioned them, the print wears out, and at last there remains nothing to be seen. Thus the *ideas*, as well as children, of our youth, often die before us; and our minds represent to us those tombs, to which we are approaching, where, though the brass and marble remain, yet the inscriptions are effaced by time, and the imagery moulders away. *The pictures drawn in our minds are laid in fading colours*; and if not sometimes refreshed, vanish and disappear. How much the constitution of our bodies, and the make of our animal spirits are concerned in this, and whether the temper of the brain make this difference, that in some it retains the characters drawn on it like marble, in others like freestone, and in others little better than sand; I shall not here inquire: though it may seem probable, that the constitution of the body does sometimes influence the memory; since we oftentimes find a disease quite strip the mind of all its *ideas*, and the flames of a fever in a few days calcine all those images to dust and confusion, which seemed to be as lasting as if graved in marble.

§ 6. *Constantly repeated Ideas can scarce be lost.*

BUT concerning the *ideas* themselves it is easy to remark, that those that are *oftest refreshed* (amongst which are those that are conveyed into the mind by more ways than one), by a frequent return of the objects or actions that produced them, *fix themselves best in the memory*, and remain clearest and longest there: And therefore those which are of the original qualities of bodies, viz. *solidity, extension, figure, motion, and rest*; and those that almost constantly affect

our bodies, as *heat* and *cold*; and those which are the affections of all kinds of beings, as *existence*, *duration*, and *number*, which almost every object that affects our senses, every thought which employs our minds, bring along with them: These, I say, and the like *ideas*, are seldom quite lost, whilst the mind retains any *ideas* at all.

§ 7. *In remembering, the Mind is often active.*

IN this secondary perception, as I may so call it, or viewing again the *ideas* that are lodged in the memory, the mind is oftentimes more than barely passive; the appearances of those dormant pictures depending sometimes on the will. The mind very often sets itself on work in search of some hidden *idea*, and turns as it were the eye of the soul upon it; though sometimes too they start up in our minds of their own accord, and offer themselves to the understanding; and very often are roused and tumbled out of their dark cells into open day-light, by some turbulent and tempestuous passions: Our affections bringing *ideas* to our memory, which had otherwise lain quiet and unregarded. This farther is to be observed concerning *ideas* lodged in the memory, and upon occasion revived by the mind, that they are not only (as the word *revive* imports) none of them new ones; but also that the mind takes notice of them, as of a former impression, and renews its acquaintance with them, as with *ideas* it had known before. So that though *ideas* formerly imprinted are not all constantly in view, yet in remembrance they are constantly known to be such as have been formerly imprinted, *i. e.* in view, and taken notice of before by the understanding.

§ 8. *The Defects in the Memory, Oblivion and Slowness.*

MEMORY, in an intellectual creature, is necessary in the next degree to perception. It is of so great moment, that where it is wanting, all the rest of our faculties are in a great measure useless: And we in our thoughts, reasonings, and knowledge, could not proceed beyond present objects, were it not for the assist-

ance of our memories, wherein there may be *two defects*.

First, That it *loses the idea* quite, and so far it produces perfect ignorance. For since we can know nothing farther than we have the *idea* of it, when that is gone, we are in perfect *ignorance*.

Secondly, That it moves slowly, and *retrieves not the ideas* that it has, and are laid up in store, *quick enough* to serve the mind upon occasions. This, if it be to a great degree, is *stupidity*; and he, who through this default in his memory, has not the *ideas* that are really preserved there ready at hand, when need and occasion calls for them, were almost as good be without them quite, since they serve him to little purpose. The dull man, who loses the opportunity whilst he is seeking in his mind for those *ideas* that should serve his turn, is not much more happy in his knowledge than one that is perfectly ignorant. It is the business therefore of the memory to furnish to the mind those dormant *ideas* which it has present occasion for; in the having them ready at hand on all occasions, consists that which we call *invention*, *fancy*, and quickness of parts.

§ 9.

THESE are defects, we may observe, in the memory of one man compared with another. There is another defect which we may conceive to be in the memory of man in general, compared with some superior created intellectual beings, which in this faculty may so far excel man, that they may have constantly in view the whole scene of all their former actions, wherein no one of the thoughts they have ever had may slip out of their sight. The omniscience of God, who knows all things past, present, and to come, and to whom the thoughts of men's hearts always lie open, may satisfy us of the possibility of this. For who can doubt but God may communicate to those glorious spirits, his immediate attendants, any of his perfections, in what proportion he pleases, as far as created finite beings can be capable? It is reported of that prodigy of parts,

Monſieur Paſcal, that, till the decay of his health had impaired his memory, he forgot nothing of what he had done, read, or thought, in any part of his rational age. This is a privilege ſo little known to moſt men, that it ſeems almoſt incredible to thoſe, who, after the ordinary way, meaſure all others by themſelves; but yet, when conſidered, may help us to enlarge our thoughts towards greater perfections of it in ſuperior ranks of ſpirits. For this of Mr. Paſcal was ſtill with a narrowneſs that human minds are confined to here, of having great variety of *ideas* only by ſucceſſion, not all at once: Whereas the ſeveral degrees of angels may probably have larger views, and ſome of them be endowed with capacities able to retain together, and conſtantly ſet before them, as in one picture, all their paſt knowledge at once. This, we may conceive, would be no ſmall advantage to the knowledge of a thinking man, if all his paſt thoughts and reaſonings could be always preſent to him. And therefore we may ſuppoſe it one of thoſe ways, wherein the knowledge of ſeparate ſpirits may exceedingly ſurpaſs ours.

§ 10. *Brutes have Memory.*

THIS faculty of laying up and retaining the *ideas* that are brought into the mind, ſeveral *other animals* ſeem to have to a great degree, as well as man. For to paſs by other inſtances, birds learning of tunes, and the endeavours one may obſerve in them to hit the notes right, put it paſt doubt with me that they have perception, and retain *ideas* in their memories, and uſe them for patterns. For it ſeems to me impoſſible, that they ſhould endeavour to conform their voices to notes (as it is plain they do), of which they had no *ideas*. For though I ſhould grant ſound may mechanically cauſe a certain motion of the animal ſpirits, in the brains of thoſe birds, whiſt the tune is actually playing; and that motion may be continued on to the muſcles of the wings, and ſo the bird mechanically be driven away by certain noiſes, becauſe this may tend to the bird's preſervation: Yet that can never be ſuppoſed a reaſon why it ſhould cauſe mechanically, either whiſt the tune was playing

much less after it has ceased, such a motion in the organs of the bird's voice, as should conform it to the notes of a foreign sound, which imitation can be of no use to the bird's preservation. But which is more, it cannot, with any appearance of reason, be supposed (much less proved) that birds, without sense and memory, can approach their notes nearer and nearer by degrees to a tune played yesterday; which if they have no *idea* of in their memory, is now nowhere, nor can be a pattern for them to imitate, or which any repeated essays can bring them nearer to. Since there is no reason why the sound of a pipe should leave traces in their brains, which not at first, but by their after endeavours, should produce the like sounds; and why the sounds they make themselves should not make traces which they should follow, as well as those of the pipe, is impossible to conceive.

CHAP. XI.

OF DISCERNING, AND OTHER OPERATIONS OF THE MIND.

§ 1. *No Knowledge without Discerning.*

ANOTHER faculty we may take notice of in our minds, is that of *discerning* and distinguishing between the several *ideas* it has. It is not enough to have a confused perception of something in general: Unless the mind had a distinct perception of different objects and their qualities, it would be capable of very little knowledge; though the bodies that affect us were as busy about us as they are now, and the mind were continually employed in thinking. On this faculty of distinguishing one thing from another, depends the *evidence and certainty* of several, even very general propositions, which have passed for innate truths; because men overlooking the true cause why those propositions find universal assent, impute it wholly to native uniform impressions: whereas it in truth *depends upon this clear discerning faculty* of the mind, whereby it perceives two

ideas to be the same, or different. But of this more hereafter.

§ 2. *The Difference of Wit and Judgment.*

How much the imperfection of accurately discriminating *ideas* one from another, lies either in the dullness or faults of the organs of sense; or want of acuteness, exercise or attention in the understanding; or hastiness and precipitancy, natural to some tempers, I will not here examine: It suffices to take notice, that this is one of the operations, that the mind may reflect on and observe in itself. It is of that consequence to its other knowledge, that so far as this faculty is in itself dull, or not rightly made use of for the distinguishing one thing from another; so far our notions are confused, and our reason and judgment disturbed or misled. If in having our *ideas* in the memory ready at hand, consists quickness of parts; in this of having them unconfused, and being able nicely to distinguish one thing from another, where there is but the least difference, consists, in a great measure, the exactness of judgment, and clearness of reason, which is to be observed in one man above another. And hence perhaps may be given some reason of that common observation, that men, who have a great deal of *wit*, and prompt memories, have not always the clearest judgment, or deepest reason: For *wit* lying most in the assemblage of *ideas*, and putting those together with quickness and variety, wherein can be found any resemblance or congruity, thereby to make up pleasant pictures, and agreeable visions in the fancy; *judgment*, on the contrary, lies quite on the other side, in separating carefully one from another, *ideas* wherein can be found the least difference, thereby to avoid being misled by similitude, and by affinity to take one thing for another. This is a way of proceeding quite contrary to metaphor and allusion, wherein for the most part lies that entertainment and pleasantry of wit, which strikes so lively on the fancy, and therefore is so acceptable to all people; because its beauty appears at first sight, and there is required no labour of thought to examine what truth or reason there

is in it. The mind, without looking any farther, rests satisfied with the agreeableness of the picture, and the gaiety of the fancy: And it is a kind of an affront to go about to examine it by the severe rules of truth and good reason; whereby it appears that it consists in something that is not perfectly conformable to them.

§ 3. *Clearness alone kinders Confusion.*

To the well distinguishing our *ideas*, it chiefly contributes, they be *clear and determinate*: And when they are so, *it will not breed any confusion* or mistake about them, though the senses should (as sometimes they do) convey them from the same object differently, on different occasions, and so seem to err. For though a man in a fever should from sugar have a bitter taste, which at another time would produce a sweet one; yet the *idea* of bitter in that man's mind would be as clear and distinct from the *idea* of sweet, as if he had tasted only gall. Nor does it make any more confusion between the two *ideas* of sweet and bitter, that the same sort of body produces at one time one, and at another time another *idea* by the taste, than it makes a confusion in two *ideas* of white and sweet, or white and round, that the same piece of sugar produces them both in the mind at the same time. And the *ideas* of orange colour and azure, that are produced in the mind, by the same parcel of the infusion of *lignum nephriticum*, are no less distinct *ideas*, than those of the same colours, taken from two very different bodies.

§ 4. *Comparing.*

THE *COMPARING* them one with another, in respect of extent, degrees, time, place, or any other circumstances, is another operation of the mind about its *ideas*, and is that upon which depends all that large tribe of *ideas*, comprehended under *relation*; which of how vast an extent it is, I shall have occasion to consider hereafter.

§ 5. *Brutes compare but imperfectly.*

How far brutes partake in this faculty, is not easy to determine; I imagine they have it not in any great degree: For though they probably have several *ideas* distinct

enough, yet it seems to me to be the prerogative of human understanding, when it has sufficiently distinguished any *ideas*, so as to perceive them to be perfectly different, and so consequently two, to cast about and consider in what circumstances they are capable to be compared: And therefore, I think, *beasts compare* not their *ideas* farther than some sensible circumstances annexed to the objects themselves. The other power of comparing, which may be observed in men, belonging to general *ideas*, and useful only to abstract reasonings, we may probably conjecture beasts have not.

§ 6. *Compounding.*

THE next operation we may observe in the mind about its *ideas*, is *COMPOSITION*; whereby it puts together several of those simple ones it has received from sensation and reflection, and combines them into complex ones. Under this of composition may be reckoned also that of *ENLARGING*; wherein though the composition does not so much appear as in more complex ones, yet it is nevertheless a putting several *ideas* together, though of the same kind. Thus, by adding several units together, we make the *idea* of a dozen; and putting together the repeated *ideas* of several perches, we frame that of a furlong.

§ 7. *Brutes compound but little.*

IN this also, I suppose, *brutes* comes far short of men: For though they take in, and retain together several combinations of simple *ideas*; as, possibly, the shape, smell, and voice of his master, make up the complex *idea* a dog has of him, or rather are so many distinct marks, whereby he knows him; yet I *do not* think they do of themselves ever compound them, and *make complex ideas*: And, perhaps, even where we think they have complex *ideas*, it is only one simple one that directs them in the knowledge of several things, which possibly they distinguish less by their sight than we imagine: For I have been credibly informed, that a bitch will nurse, play with, and be fond of young foxes, as much as, and in place of her puppies, if you can but get them once to suck her so long, that her milk may

go through them. And those animals, which have a numerous brood of young ones at once, appear not to have any knowledge of their number : for though they are mightily concerned for any of their young that are taken from them whilst they are in sight or hearing ; yet if one or two of them be stolen from them in their absence, or without noise, they appear not to miss them, or to have any sense that their number is lessened.

§ 8. *Naming.*

WHEN children have, by repeated sensations, got *ideas* fixed in their memories, they begin, by degrees, to learn the use of signs. And when they have got the skill to apply the organs of speech to the framing of articulate sounds, they begin to make *use of words*, to signify their *ideas* to others. These verbal signs they sometimes borrow from others, and sometimes make themselves, as one may observe among the new and unusual names children often give to things in their first use of language.

§ 9. *Abstracting.*

THE use of words then being to stand as outward marks of our internal *ideas*, and those *ideas* being taken from particular things, if every particular *idea* that we take in should have a distinct name, names must be endless. To prevent this, the mind makes the particular *ideas*, received from particular objects, to become general ; which is done by considering them as they are in the mind such appearances, separate from all other existences, and the circumstances of real existence, as time, place, or any other concomitant *ideas*. This is called **ABSTRACTION**, whereby *ideas*, taken from particular beings, become general representatives of all of the same kind, and their names general names, applicable to whatever exists conformable to such abstract *ideas*. Such precise naked appearances in the mind, without considering how, whence, or with what others they came there, the understanding lays up (with names commonly annexed to them), as the standards to rank real existences into sorts, as they agree with these patterns, and to *denominate* them accordingly. Thus the

same colour being observed to-day in chalk or snow, which the mind yesterday received from milk, it considers that appearance alone makes it a representative of all of that kind ; and having given it the name *whiteness*, it by that sound signifies the same quality, where-soever to be imagined or met with : And thus universals, whether *ideas* or terms, are made.

§ 10. *Brutes abstract not.*

IF it may be doubted, whether *beasts* compound and enlarge their *ideas* that way to any degree ; this, I think, I may be positive in, that the power of *abstracting* is not at all in them ; and that the having of general *ideas*, is that which puts a perfect distinction betwixt man and brutes, and is an excellency which the faculty of brutes do by no means attain to. For it is evident we observe no footsteps in them, of making use of general signs for universal *ideas* ; from which we have reason to imagine, that they have not the faculty of abstracting, or making general *ideas*, since they have no use of words, or any other general signs.

§ 11.

NOR can it be imputed to their want of fit organs to frame articulate sounds, that they have no use or knowledge of general words ; since many of them, we find, can fashion such sounds, and pronounce words distinctly enough, but never with any such application. And on the other side, men who through some defect in the organs want words, yet fail not to express their universal *ideas* by signs, which serve them instead of general words ; a faculty which we see *beasts* come short in. And therefore I think we may suppose, that it is in this that the species of *brutes* are discriminated from man ; and it is that proper difference wherein they are wholly separated, and which at last widens to so vast a distance : For if they have any *ideas* at all, and are not bare machines (as some would have them), we cannot deny them to have some reason. It seems as evident to me, that they do some of them in certain instances reason, as that they have sense ; but it is only in particular *ideas*, just as they received them from their senses.

They are the best of them tied up within those narrow bounds, and *have not* (as I think) the faculty to enlarge them by any kind of *abstraction*.

§ 12. *Idiots and Madmen.*

How far *idiots* are concerned in the want or weakness of any, or all of the foregoing faculties, an exact observation of their several ways of faltering would no doubt discover: For those who either perceive but dully, or retain the *ideas* that come into their minds but ill, who cannot readily excite or compound them, will have little matter to think on. Those who cannot distinguish, compare and abstract, would hardly be able to understand and make use of language, or judge or reason to any tolerable degree; but only a little and imperfectly about things present, and very familiar to their senses. And, indeed, any of the forementioned faculties, if wanting, or out of order, produce suitable defects in men's understandings and knowledge.

§ 13.

In fine, the defects in *naturals* seem to proceed from want of quickness, activity, and motion in the intellectual faculties, whereby they are deprived of reason; whereas, *madmen*, on the other side, seem to suffer by the other extreme: for they do not appear to me to have lost the faculty of reasoning; but having joined together some *ideas* very wrongly, they mistake them for truths, and they err as men do that argue right from wrong principles. For by the violence of their imaginations, having taken their fancies for realities, they make right deductions from them. Thus you shall find a distracted man fancying himself a king, with a right inference require suitable attendance, respect, and obedience: Others, who have thought themselves made of glass, have used the caution necessary to preserve such brittle bodies. Hence it comes to pass, that a man who is very sober, and of a right understanding in all other things, may in one particular be as frantic as any in *bedlam*; if either by any sudden very strong impression, or long fixing his fancy upon one sort of thoughts, incoherent *ideas* have been cemented together.

so powerfully, as to remain united. But there are degrees of madness, as of folly; the disorderly jumbling *ideas* together, is in some more and some less. In short, herein seems to lie the difference between idiots and madmen, that madmen put wrong *ideas* together, and so make wrong propositions, but argue and reason right from them: but idiots make very few or no propositions, and reason scarce at all.

§ 14. *Method.*

THESE, I think, are the first faculties and operations of the mind, which it makes use of in understanding; and though they are exercised about all its *ideas* in general, yet the instances I have hitherto given have been chiefly in simple *ideas*: And I have subjoined the explication of these faculties of the mind to that of simple *ideas*, before I come to what I have to say concerning complex ones, for these following reasons:

First, Because several of these faculties being exercised at first principally about simple *ideas*, we might, by following nature in its ordinary method, trace and discover them in their rise, progress, and gradual improvements.

Secondly, Because observing the faculties of the mind, how they operate about simple *ideas*, which are usually, in most men's minds, much more clear, precise, and distinct than complex ones, we may the better examine and learn how the mind abstracts, denominates, compares and exercises its other operations about those which are complex, wherein we are much more liable to mistake.

Thirdly, Because these very operations of the mind about *ideas*, received from *sensation*, are themselves, when reflected on, another set of *ideas*, derived from that other source of our knowledge which I call *reflection*, and therefore fit to be considered in this place after the simple *ideas* of *sensation*. Of compounding, comparing, abstracting, &c. I have but just spoken, having occasion to treat of them more at large in other places.

§ 15. *These are the Beginnings of human Knowledge.*
 AND thus I have given a short, and, I think, true *history of the first beginnings of human knowledge*, whence the mind has its first objects, and by what steps it makes its progress to the laying in and storing up those *ideas*, out of which is to be framed all the knowledge it is capable of; wherein I must appeal to experience and observation, whether I am in the right: The best way to come to truth, being to examine things as really they are, and not to conclude they are as we fancy of ourselves, or have been taught by others to imagine.

§ 16. *Appeal to Experience.*

To deal truly, *this is the only way* that I can discover, whereby the *ideas* of things are brought into the understanding: If other men have either innate *ideas*, or infused principles, they have reason to enjoy them; and if they are sure of it, it is impossible for others to deny them the privilege that they have above their neighbours. I can speak but of what I find in myself, and is agreeable to those notions; which, if we will examine the whole course of men in their several ages, countries, and educations, seem to depend on those foundations which I have laid, and to correspond with this method in all the parts and degrees thereof.

§ 17. *Dark Room.*

I PRETEND not to teach, but to inquire, and therefore cannot but confess here again, that external and internal sensation are the only passages that I can find of knowledge to the understanding. These alone, as far as I can discover, are the windows by which light is let into this *dark room*: For methinks the understanding is not much unlike a closet wholly shut from light, with only some little opening left, to let in external visible resemblances, or *ideas* of things without: Would the pictures coming into such a dark room but stay there, and lie so orderly as to be found upon occasion, it would very much resemble the understanding of a man in reference to all objects of sight, and the *ideas* of them.

These are my guesses concerning the means whereby the understanding comes to have and retain simple *ideas*,

and the modes of them, with some other operations about them. I proceed now to examine some of these simple *ideas*, and their modes, a little more particularly.

CHAP. XII.

OF COMPLEX IDEAS.

§ 1. *Made by the Mind out of simple ones.*

WE have hitherto considered those *ideas*, in the reception whereof the mind is only passive, which are those simple ones received from *sensation* and *reflection* before mentioned, whereof the mind cannot make one to itself, nor have any *idea* which does not wholly consist of them. But as the mind is wholly passive in the reception of all its simple *ideas*, so it exerts several acts of its own, whereby out of its simple *ideas*, as the materials and foundations of the rest, the other are framed. The acts of the mind, wherein it exerts its power over its simple *ideas*, are chiefly these three: 1. Combining several simple *ideas* into one compound one, and thus all complex *ideas* are made. 2. The second is bringing two *ideas*, whether simple or complex, together, and setting them by one another, so as to take a view of them at once, without uniting them into one; by which way it gets all its *ideas* of relations. 3. The third is separating them from all other *ideas* that accompany them in their real existence; this is called *abstraction*: And thus all its general *ideas* are made. This shows man's power, and its way of operation, to be much what the same in the material and intellectual world. For the materials in both being such as he has no power over, either to make or destroy, all that man can do is either to unite them together, or to set them by one another, or wholly separate them. I shall here begin with the first of these in the consideration of complex *ideas*, and come to the other two in their due places. As simple *ideas* are observed to exist in several combinations united together, so the mind has a power to consider several of them united together.

as one *idea*; and that not only as they are united in external objects, but as itself has joined them. *Ideas* thus made up of several simple ones put together, I call *complex*; such as are *beauty, gratitude, a man, an army, the universe*; which though complicated of various simple *ideas*, or *complex ideas* made up of simple ones, yet are, when the mind pleases, considered each by itself as one entire thing, and signified by one name.

§ 2. *Made voluntarily.*

IN this faculty of repeating and joining together its *ideas*, the mind has great power in varying and multiplying the objects of its thoughts, infinitely beyond what *sensation* or *reflection* furnished it with; but all this still confined to those simple *ideas* which it received from those two sources, and which are the ultimate materials of all its compositions: For simple *ideas* are all from things themselves, and of these *the mind can* have no more, nor other than what are suggested to it. It can have no other *ideas* of sensible qualities than what come from without by the senses, nor any *ideas* of other kind of operations of a thinking substance, than what it finds in itself; but when it has once got these simple *ideas*, it is not confined barely to observation, and what offers itself from without: It can, by its own power, put together those *ideas* it has, and *make new complex ones*, which it never received so united.

§ 3. *Are either Modes, Substances, or Relations.*

COMPLEX *ideas*, however compounded and decomposed, though their number be infinite, and the variety endless, wherewith they fill and entertain the thoughts of men; yet, I think, they may be all reduced under these three heads:

1. *Modes.*

2. *Substances.*

3. *Relations.*

§ 4. *Modes.*

FIRST, *Modes* I call such complex *ideas*, which however compounded, contain not in them the supposition of subsisting by themselves, but are considered as dependances on, or affections of substances; such are the *ideas* sig-

nified by the words *triangle*, *gratitude*, *murder*, &c. And if in this I use the word *mode* in somewhat a different sense from its ordinary signification, I beg pardon; it being unavoidable in discourses, differing from the ordinary received notions, either to make new words, or to use old words in somewhat a new signification: The latter whereof, in our present case, is perhaps the more tolerable of the two.

§ 5. *Simple and mixed Modes.*

OF these *modes*, there are two sorts which deserve distinct consideration: *First*, There are some which are only variations, or different combinations of the same simple *idea*, without the mixture of any other, as a dozen or score; which are nothing but the *ideas* of so many distinct units added together: And these I call *simple modes*, as being contained within the bounds of one simple *idea*.

Secondly, There are others compounded of simple *ideas* of several kinds, put together to make one complex one; *v. g.* *beauty*, consisting of a certain composition of colour and figure, causing delight in the beholder; *theft*, which being the concealed change of the possession of any thing, without the consent of the proprietor, contains, as is visible, a combination of several *ideas* of several kinds: And these I call *mixed modes*.

§ 6. *Substances single or collective.*

SECONDLY, The *ideas* of *substances* are such combinations or simple *ideas*, as are taken to represent distinct particular things subsisting by themselves; in which the supposed or confused *idea* of substance, such as it is, is always the first and chief. Thus if to substance be joined the simple *idea* of a certain dull whitish colour, with certain degrees of weight, hardness, ductility, and fusibility, we have the *idea* of *lead*, and a combination of the *ideas* of a certain sort of figure, with the powers of motion, thought, and reasoning, joined to substance, make the ordinary *idea* of a *man*. Now of substances also there are two sorts of *ideas*, one of single substances, as they exist separately, as of a *man* or a *sheep*; the other of several of those put together, as an *army*

of men, or *flock* of sheep : Which *collective* ideas of several *substances* thus put together, are as much each of them one single *idea*, as that of a man, or an unit.

§ 7. *Relation.*

THIRDLY, The last sort of complex *ideas*, is that we call *relation*, which consists in the consideration and comparing one *idea* with another. Of these several kinds we shall treat in their order.

§ 8. *The abstrusest Ideas from the two Sources.*

If we trace the progress of our minds, and with attention observe how it repeats, adds together, and unites its simple *ideas* received from sensation or reflection, it will lead us farther than at first perhaps we should have imagined. And I believe we shall find, if we warily observe the originals of our notions, that even *the most abstruse* ideas, how remote soever they may seem from sense, or from any operation of our own minds, are yet only such as the understanding frames to itself, by repeating and joining together *ideas*, that it had either from objects of sense, or from its own operations about them : So that those even large and *abstract* ideas, are derived from *sensation or reflection*, being no other than what the mind, by the ordinary use of its own faculties, employed about *ideas* received from objects of sense, or from the operations it observes in itself about them, may and does attain unto. This I shall endeavour to show in the *ideas* we have, of *space*, *time*, and *infinity*, and some few others, that seem the most remote from those originals.

CHAP. XIII.

OF SIMPLE MODES, AND FIRST OF THE SIMPLE MODES OF SPACE .

§ 1. *Simple Modes.*

THOUGH in the foregoing part I have often mentioned simple *ideas*, which are truly the materials of all our knowledge ; yet having treated of them there, rather in the way that they come into the mind,

than as distinguished from others more compounded, it will not be perhaps amiss to take a view of some of them again under this consideration, and examine those different *modifications of the same idea*; which the mind either finds in things existing, or is able to make within itself, without the help of any extrinsical object, or any foreign suggestion.

Those *modifications of any one simple idea* (which, as has been said I call *simple modes*) are as perfectly different and distinct *ideas* in the mind, as those of the greatest distance and contrariety. For the *idea of two* is as distinct from that of *one*, as *blueness* from *heat*, or either of them from any number: And yet it is made up only of that *simple idea* of an unit repeated; and repetitions of this kind joined together, make those distinct *simple modes*, of a *dozen*, a *gross*, a *million*.

§ 2. Idea of Space.

I SHALL begin with the *simple idea* of *space*. I have showed above, *chap. 4.* that we get the *idea* of *space*, both by our sight and touch; which, I think, is so evident, that it would be as needless to go to prove that men perceive, by their sight, a distance between bodies of different colours, or between the parts of the same body, as that they see colours themselves; nor is it less obvious, that they can do so in the dark by feeling and touch.

§ 3. Space and Extension.

THIS space considered barely in length between any two beings, without considering any thing else between them, is called *distance*; if considered in length, breadth, and thickness, I think it may be called *capacity*. The term *extension* is usually applied to it, in what manner soever considered.

§ 4. Immensity.

EACH different distance is a different modification of *space*; and *each idea of any different distance or space is a simple mode of this idea*. Men, for the use, and by the custom of measuring, settle in their minds the *ideas* of certain stated lengths, such as are an *inch*, *foot*, *yard*, *fathom*, *mile*, *diameter of the earth*, &c. which are so

many distinct *ideas* made up only of space. When any such stated lengths or measures of space are made familiar to men's thoughts, they can in their minds repeat them as often as they will without mixing or joining to them the *idea* of body, or any thing else; and frame to themselves the *ideas* of long, square, or cubic, *feet*, *yards*, or *fathoms*, here amongst the bodies of the universe, or else beyond the utmost bounds of all bodies; and by adding these still one to another, enlarge their *idea* of space as much as they please. This power of repeating, or doubling any *idea* we have of any distance, and adding it to the former as often as we will, without being ever able to come to any stop or stint, let us enlarge it as much as we will, is that which gives us the *idea* of *immensity*.

§ 5. *Figure.*

THERE is another modification of this *idea*, which is nothing but the relation which the parts of the termination of extension, or circumscribed space, have amongst themselves. This the touch discovers in sensible bodies, whose extremities come within our reach; and the eye takes both from bodies and colours, whose boundaries are within its view: Where observing how the extremities terminate either in straight lines, which meet at discernible angles, or in crooked lines, wherein no angles can be perceived, by considering these as they relate to one another, in all parts of the extremities of any body or space, it has that *idea* we call *figure*, which affords to the mind infinite variety. For besides the vast number of different figures that do really exist in the coherent masses of matter, the stock that the mind has in its power, by varying the *idea* of space, and thereby making still new compositions, by repeating its own *ideas*, and joining them as it pleases, is perfectly inexhaustible: And so it can multiply figures in *infinitum*.

§ 6. *Figure.*

FOR the mind having a power to repeat the *idea* of any length directly stretched out, and join it to another in the same direction, which is to double the length of

that straight line, or else join it to another with what inclination it thinks fit, and so make what sort of angles it pleases; and being able also to shorten any line it imagines, by taking from it one half, or one fourth, or what part it pleases, without being able to come to an end of any such divisions, it can make an angle of any bigness: So also the lines that are its sides, of what length it pleases; which joining again to other lines of different lengths and at different angles, till it has wholly enclosed any space, it is evident, that it can multiply *figures* both in their shape and capacity *in infinitum*; all which are but so many different *simple modes of space*.

The same that it can do with straight lines, it can do also with crooked, or crooked and straight together; and the same it can do in lines, it can also in superficies: By which we may be led into farther thoughts of the endless variety of *figures*, that the mind has a power to make, and thereby to multiply the *simple modes of space*.

§ 7. Place.

ANOTHER *idea* coming under this head, and belonging to this tribe, is that we call *place*: As in simple space, we consider the relation of distance between any two bodies or points; so in our *idea of place*, we consider the relation of distance betwixt any thing, and any two or more points, which are considered as keeping the same distance one with another, and so considered as at rest: for when we find any thing at the same distance now, which it was yesterday from any two or more points, which have not since changed their distance one with another, and with which we then compared it, we say it hath kept the same *place*; but if it hath sensibly altered its distance with either of those points, we say it hath changed its place: Though, vulgarly speaking, in the common notion of *place*, we do not always exactly observe the distance from precise points; but from larger portions of sensible objects, to which we consider the thing placed to bear relation, and its distance from which we have some reason to observe.

§ 8.

THUS, a company of chessmen standing on the same squares of the chessboard, where we left them, we say they are all in the *same place*, or unmoved; though perhaps the chessboard hath been in the mean time carried out of one room into another, because we compared them only to the parts of the chessboard, which keep the same distance one with another. The chessboard, we also say, is in the *same place* it was, if it remain in the same part of the cabin, though perhaps the ship, which it is in, sails all the while: And the ship is said to be in the *same place*, supposing it kept the same distance with the parts of the neighbouring land; though perhaps the earth hath turned round: And so both chessmen, and board, and ship, have every one *changed place*, in respect of remoter bodies, which have kept the same distance with one another. But yet the distance from certain parts of the board, being that which determines the place of the chessmen; and the distance from the fixed parts of the cabin (with which we made the comparison) being that which determined the place of the chessboard; and the fixed parts of the earth, that by which we determined the place of the ship; these things may be said to be in the *same place* in those respects: Though their distance from some other things, which in this matter we did not consider, being varied, they have undoubtedly *changed place* in that respect, and we ourselves shall think so, when we have occasion to compare them with those other.

§ 9.

BUT this modification of distance, we call *place*, being made by men, for their common use, that by it they might be able to design the particular position of things, where they had occasion for such designation; men consider and determine of this *place*, by reference to those adjacent things which best served to their present purpose, without considering other things, which, to another purpose, would better *determine the place* of the same thing. Thus in the chessboard the use of the *designation* of the *place* of each chessman, being determin-

ed only within that chequered piece of wood; it would cross that purpose, to measure it by any thing else: But when these very chessmen are put up in a bag, if any one should ask where the black king is, it would be proper to *determine the place* by the parts of the room it was in, and not by the chessboard; there being another use of *designing the place* it is now in, than when in play it was on the chessboard, and so must be determined by other bodies. So if any one should ask, in what place are the verses, which report the story of *Nisus* and *Eurialus*, it would be very improper to determine this place, by saying they were in such a part of the earth, or in Bodley's Library: But the right designation of the place would be by the parts of Virgil's works; and the proper answer would be, That these verses were about the middle of the ninth book of his *Æneids*; and that they have been always constantly in the same place ever since Virgil was printed: which is true, though the book itself hath moved a thousand times; the use of the *idea* of place here, being to know only in what part of the book that story is, that so upon occasion we may know where to find it, and have recourse to it for our use.

§ 10. *Place.*

THAT our *idea* of place is nothing else but such a relative position of any thing, as I have before mentioned, I think is plain, and will be easily admitted, when we consider that we can have no *idea* of the place of the universe, though we can of all the parts of it; because beyond that we have not the *idea* of any fixed, distinct, particular beings, in reference to which we can imagine it to have any relation of distance; but all beyond it is one uniform space or expansion, wherein the mind finds no variety, no marks. For to say, that the world is somewhere, means no more than that it does exist: This, though a phrase borrowed from place, signifying only its existence, not location; and when one can find out, and frame in his mind clearly and distinctly the place of the universe, he will be able to tell us whether it moves or stands still in the undistin-

guishable *inane* of infinite space ; though it be true that the word *place* has sometimes a more confused sense, and stands for that space which any body takes up ; and so the universe is in a place. The *idea* therefore of *place* we have by the same means that we get the *idea* of space (whereof this is but a particular limited consideration), viz. by our sight and touch ; by either of which we receive into our minds the *ideas* of extension or distance.

§ 11. *Extension and Body not the same.*

THERE are some that would persuade us, that *body and extension are the same thing* ; who either change the signification of words, which I would not suspect them of, they having so severely condemned the philosophy of others, because it hath been too much placed in the uncertain meaning, or deceitful obscurity of doubtful or insignificant terms. If therefore they mean by *body and extension the same* that other people do, viz. by *body*, something that is solid and extended, whose parts are separable and moveable different ways ; and by *extension* only the space that lies between the extremities of those solid coherent parts, and which is possessed by them : They confound very different *ideas* one with another. For I appeal to every man's own thoughts, whether the *idea* of space be not as distinct from that of solidity, as it is from the *idea* of scarlet colour ? It is true, solidity cannot exist without extension, neither can scarlet colour exist without extension ; but this hinders not, but that they are distinct *ideas*. Many *ideas* require others as necessary to their existence or conception, which yet are very distinct *ideas*. Motion can neither be, nor be conceived without space ; and yet motion is not space, nor space motion : Space can exist without it, and they are very distinct *ideas* ; and so I think, are those of space and solidity. Solidity is so inseparable an *idea* from body, that upon that depends its filling of space, its contact, impulse, and communication of motion upon impulse. And if it be a reason to prove, that spirit is different from body, because thinking includes not the *idea* of extension in it ; the same

reason will be as valid, I suppose, to prove, that *space is not body*, because it includes not the *idea* of solidity in it: *Space* and *solidity* being as *distinct ideas* as thinking and extension, and as wholly separable in the mind one from another. *Body* then and *extension*, it is evident, are two distinct *ideas*. For,

§ 12.

FIRST, *Extension* includes no solidity, nor resistance to the motion of *body*, as *body* does.

§ 13.

SECONDLY, The parts of pure space inseparable one from the other; so that the continuity cannot be separated, neither really nor mentally. For I demand of any one to remove any part of it from another, with which it is continued, even so much as in thought. To divide and separate actually is, as I think, by removing the parts one from another, to make two superficies, where before there was a continuity: And to divide mentally, is to make in the mind two superficies, where before there was a continuity, and consider them as removed one from the other; which can only be done in things considered by the mind, as capable of being separated; and by separation, of acquiring new distinct superficies, which they then have not, but are capable of: But neither of these ways of separation, whether real or mental, is, as I think, compatible to pure *space*.

It is true, a man may consider so much of such a *space*, as is answerable or commensurate to a foot, without considering the rest; which is indeed a partial consideration, but not so much as mental separation or division: Since a man can no more mentally divide, without considering two superficies, separate one from the other, than he can actually divide, without making two superficies disjoined one from the other: But a partial consideration is not separating. A man may consider light in the sun without its heat; or mobility in body without its extension, without thinking of their separation. One is only a partial consideration, terminating

in one alone; and the other is a consideration of both, as existing separately.

§ 14.

THIRDLY, The parts of pure *space* are immoveable, which follows from their inseparability; *motion* being nothing but change of distance between any two things: But this cannot be between parts that are inseparable; which therefore must needs be at perpetual rest one amongst another.

Thus the determined *idea* of simple *space* distinguishes it plainly and sufficiently from *body*; since its parts are inseparable, immoveable, and without resistance to the motion of body.

§ 15. *The Definition of Extension explains it not.*

If any one ask me, *What this space, I speak of, is?* I will tell him, when he tells me what his *extension* is. For to say, as is usually done, that extension is to have *partes extra partes*, is to say only, that *extension* is *extension*: For what am I the better informed in the nature of *extension*, when I am told, that *extension* is to have *parts that are extended, exterior to parts that are extended*, i. e. *extension* consists of extended parts; as if one asking, what a fibre was? I should answer him, That it was a thing made up of several fibres: Would he hereby be enabled to understand what a fibre was better than he did before? Or rather, would he not have reason to think, that my design was to make sport with him, rather than seriously to instruct him?

§ 16. *Divison of Beings into Bodies and Spirits, proves not Space and Body the same.*

THOSE who contend that *space* and *body* are the same, bring this *dilemma*: Either this *space* is something or nothing; if nothing be between two bodies, they must necessarily touch: if it be allowed to be something, they ask, Whether it be body or spirit? To which I answer, by another question, Who told them, that there was, or could be nothing but solid beings, which could not think, and thinking beings that were not extended? Which is all they mean by the terms *body* and *spirit*.

§ 17. *Substance which we know not, no Proof against Space without Body.*

IF it be demanded (as usually it is) whether this *space*, void of *body*, be *substance* or *accident*; I shall readily answer I know not; nor shall be ashamed to own my ignorance, till they that ask shew me a clear distinct *idea* of *substance*.

§ 18.

I ENDEAVOUR, as much as I can, to deliver myself from those fallacies which we are apt to put upon ourselves, by taking words for things. It helps not our ignorance to feign a knowledge where we have none, by making a noise with sounds, without clear and distinct significations. Names made at pleasure neither alter the nature of things, nor make us understand them, but as they are signs of, and stand for determined *ideas*. And I desire those who lay so much stress on the sound of these two syllables, *substance*, to consider whether applying it, as they do, to the infinite incomprehensible GOD, to finite spirit, and to body, it be in the same sense; and whether it stands for the same *idea*, when each of those three so different beings are called *substances*. If so, whether it will not thence follow, that God, spirits, and body, agreeing in the same common nature of *substance*, differ any otherwise than in a bare different modification of that *substance*; as a tree and a pebble being in the same sense body, and agreeing in the common nature of body, differ only in a bare modification of that common matter: which will be a very harsh doctrine. If they say that they apply it to God, finite spirits, and matter, in three different significations; and that it stands for one *idea*, when GOD is said to be a *substance*; for another, when the soul is called *substance*; and for a third, when a body is called so: If the name *substance* stands for three several distinct *ideas*, they would do well to make known those distinct *ideas*, or, at least, to give three distinct names to them, to prevent in so important a notion the confusion and errors that will naturally follow from the promiscuous use of so doubtful a term; which is so far from being

suspected to have three distinct, that in ordinary use it has scarce any one clear distinct signification: And if they can thus make three distinct *ideas* of *substance*, what hinders why another may not make a fourth?

§ 19. *Substance and Accidents of little Use in Philosophy.*

THEY who first ran into the notion of *accidents*, as a sort of real beings that needed something to inhere in, were forced to find out the word *substance* to support them. Had the poor *Indian* philosopher (who imagined that the earth also wanted something to bear it up), but thought of this word *substance*, he needed not to have been at the trouble to find an elephant to support it, and a tortoise to support his elephant: the word *substance* would have done it effectually. And he that inquired might have taken it for as good an answer from an *Indian* philosopher, that *substance*, without knowing what it is, is that which supports the earth; as we take it for a sufficient answer, and good doctrine, from our *European* philosophers, that *substance*, without knowing what it is, is that which supports *accidents*. So that of *substance* we have no *idea* of what it is, but only a confused obscure one of what it does.

§ 20.

WHATEVER a learned man may do here, an intelligent *American*, who inquired into the nature of things, would scarce take it for a satisfactory account, if desiring to learn our architecture, he should be told, that a pillar was a thing supported by a *basis*, and a *basis* something that supported a pillar. Would he not think himself mocked, instead of taught, with such an account as this? And a stranger to them would be very liberally instructed in the nature of books, and the things they contained, if he should be told that all learned books consisted of paper and letter, and that letters were things inhering in paper, and paper a thing that held forth letters: A notable way of having clear *ideas* of letters and paper; but were the *Latin* words *inherentia* and *substantia* put into the plain *English* ones that answer them, and were called *sticking on* and *under-propping*, they would better discover to us the very great clearness.

there is in the doctrine of *substance* and *accidents*, and shew of what use they are in deciding of questions in philosophy.

§ 21. *A Vacuum beyond the utmost Bounds of Body.*

BUT to return to our *idea* of *space*. If *body* be not supposed infinite, which I think no one will affirm, I would ask, Whether if GOD placed a man at the extremity of corporeal beings, he could not stretch his hand beyond his body? If he could, then he would put his arm where there was before *space* without *body*; and if there he spread his fingers, there would still be *space* between them without *body*. If he could not stretch out his hand, it must be because of some external hinderance (for we suppose him alive, with such a power of moving the parts of his body that he hath now, which is not in itself impossible, if GOD so pleased to have it; or, at least, it is not impossible for God so to move him): And then I ask, Whether that which hinders his hand from moving outwards, be substance or accident, something or nothing? And when they have resolved that, they will be able to resolve themselves what that is, which is or may be between two bodies at a distance, that is not body, and has no solidity. In the mean time, the argument is at least as good, that where nothing hinders (as beyond the utmost bounds of all bodies), a *body* put into motion may move on; as where there is nothing between, there two bodies must necessarily touch: For pure *space* between, is sufficient to take away the necessity of mutual contact; but bare *space* in the way is not sufficient to stop motion. The truth is, these men must either own that they think body infinite, though they are loth to speak it out, or else affirm that *space* is not *body*. For I would fain meet with that thinking man, that can in his thoughts set any bounds to *space*, more than he can to duration; or by thinking, hope to arrive at the end of either: And therefore, if his *idea* of eternity be infinite, so is his *idea* of immensity; they are both finite or infinite alike.

§ 22. *The Power of Annihilation proves a Vacuum.*

FARTHER, those who assert the impossibility of *space* existing without *matter*, must not only make body infi-

nite, but must also deny a power in God to annihilate any part of matter. No one, I suppose, will deny that God can put an end to all motion that is in matter, and fix all the bodies of the universe in a perfect quiet and rest, and continue them so long as he pleases. Whoever then will allow, that God can, during such a general rest, annihilate either this book, or the body of him that reads it, must necessarily admit the possibility of a *vacuum*: For it is evident, that the space that was filled by the parts of the annihilated body, will still remain, and be a space without body. For the circumambient bodies being in perfect rest, are a wall of adamant, and in that state make it a perfect impossibility for any other body to get into that space. And indeed the necessary motion of one particle of matter into the place from whence another particle of matter is removed, is but a consequence from the supposition of plenitude; which will therefore need some better proof than a supposed matter of fact, which experiment can never make out: our own clear and distinct *ideas* plainly satisfying us, that there is no necessary connection between *space* and *solidity*, since we can conceive the one without the other. And those who dispute for or against a *vacuum*, do thereby confess they have distinct *ideas* of *vacuum* and *plenum*, i. e. that they have an *idea* of extension, void of solidity, though they deny its existence; or else they dispute about nothing at all. For they who so much alter the signification of words, as to call *extension* *body*, and consequently make the whole essence of body to be nothing but pure extension without solidity, must talk absurdly whenever they speak of *vacuum*, since it is impossible for extension to be without extension. For *vacuum*, whether we affirm or deny its existence, signifies space without body, whose very existence no one can deny to be possible, who will not make matter infinite, and take from God a power to annihilate any particle of it.

§ 23. *Motion proves a Vacuum.*

BUT not to go so far as beyond the utmost bounds of body in the universe, nor appeal to God's omnipoten-

cy, to find a *vacuum*, the *motion* of bodies that are in our view and neighbourhood seem to me plainly to evince it. For I desire any one so to divide a solid body, of any dimension he pleases, as to make it possible for the solid parts to move up and down freely every way within the bounds of that superficies, if there be not left in it a void space, as big as the least part into which he has divided the said solid body. And if where the least particle of the body divided is as big as a mustard-seed, a void space equal to the bulk of a mustard-seed be requisite to make room for the free motion of the parts of the divided body within the bounds of its superficies, where the particles of matter are 100,000,000 less than a mustard-seed, there must also be a space void of solid matter as big as 100,000,000 part of a mustard-seed; for if it hold in one, it will hold in the other, and so on *in infinitum*. And let this void space be as little as it will, it destroys the hypothesis of *plenitude*. For if there can be a space void of body equal to the smallest separate particle of matter now existing in nature, it is still space without body; and makes as great a difference between space and body, as if it were μέγα χάσμα, a distance as wide as any in nature. And therefore, if we suppose not the void space necessary to motion, equal to the least parcel of the divided solid matter, but to 1-10th, or 1000th of it; the same consequence will always follow of space without matter.

§ 24. *The Ideas of Space and Body distinct.*

BUT the question being here, Whether the *idea* of space or *extension* be the same with the *idea* of body, it is not necessary to prove the real existence of a *vacuum*, but the *idea* of it; which it is plain men have, when they inquire and dispute, whether there be a *vacuum* or no. For if they had not the *idea* of space without body, they could not make a question about its existence: And if their *idea* of body did not include in it something more than the bare *idea* of space, they could have no doubt about the plenitude of the world; and it would be as absurd to demand, whether there were

space without body, as whether there were space without space, or body without body, since these were but different names of the same *idea*.

§ 25. *Extension being inseparable from Body, proves it not the same.*

It is true, the *idea* of *extension* joins itself so inseparably with all visible and most tangible qualities, that it suffers us to see no one, or feel very few external objects, without taking in impressions of extension too. This readiness of extension to make itself be taken notice of so constantly with other *ideas*, has been the occasion, I guess, that some have made the whole essence of *body* to consist in extension; which is not much to be wondered at, since some have had their minds, by their eyes and touch (the busiest of all our senses), so filled with the *idea* of extension, and as it were wholly possessed with it, that they allowed no existence to any thing that had not extension. I shall not now argue with those men, who take the measure and possibility of all being, only from their narrow and gross imaginations: But having here to do only with those who conclude the essence of body to be *extension*, because they say they cannot imagine any sensible quality of any body without extension; I shall desire them to consider, that had they reflected on their *ideas* of tastes and smells, as much as on those of sight and touch: nay, had they examined their *ideas* of hunger and thirst, and several other pains, they would have found that they included in them no *idea* of extension at all; which is but an affection of body, as well as the rest, discoverable by our senses, which are scarce acute enough to look into the pure essences of things.

§ 26.

If those *ideas*, which are constantly joined to all others, must therefore be concluded to be the essence of those things, which have constantly those *ideas* joined to them, and are inseparable from them; then unity is without doubt the essence of every thing. For there is not any object of sensation or reflection, which does not carry

with it the *idea* of one : But the weakness of this kind of argument we have already shown sufficiently.

§ 27. *Ideas of Space and Solidity distinct.*

To conclude, whether men shall think concerning the existence of a *vacuum*, this is plain to me, that we have as clear an *idea of space distinct from solidity*, as we have of solidity distinct from motion, or motion from space. We have not any two more distinct *ideas*, and we can as easily conceive space without solidity, as we can conceive body or space without motion ; though it be ever so certain, that neither body nor motion can exist without space. But whether any one will take space to be only a relation resulting from the existence of other beings at a distance, or whether they will think the words of the most knowing king Solomon, *the heaven, and the heaven of heavens cannot contain thee* ; or those more emphatical ones of the inspired philosopher St. Paul, *In him we live, move, and have our being* ; are to be understood in a literal sense, I leave every one to consider : only our *idea of space* is, I think, such as I have mentioned, and distinct from that of *body*. For whether we consider in matter itself the distance of its coherent solid parts, and call it, in respect of those solid parts, *extension* ; or whether, considering it as lying between the extremities of any body in its several dimensions, we call it *length, breadth, and thickness* ; or else considering it as lying between any two bodies, or positive beings, without any consideration whether there be any matter or no between, we call it *distance* : However named or considered, it is always the same uniform simple *idea of space*, taken from objects about which our senses have been conversant ; whereof having settled *ideas* in our minds, we can revive, repeat, and add them one to another as often as we will, and consider the space or distance so imagined, either as filled with solid parts, so that another body cannot come there, without displacing and thrusting out the body that was there before ; or else as void of solidity, so that a body of equal dimensions to that empty or pure space, may be placed in it,

without the removing or expulsion of any thing that was there. But to avoid confusion in discourses concerning this matter, it were possibly to be wished that the name *extension* were applied only to matter, or the distance of the extremities of particular bodies; and the term *expansion* to space in general, with or without solid matter possessing it, so as to say *space is expanded*, and *body extended*. But in this every one has his liberty: I propose it only for the more clear and distinct way of speaking.

§ 28. *Men differ little in clear simple Ideas.*

THE knowing precisely what our words stand for, would, I imagine, in this as well as a great many other cases, quickly end the dispute. For I am apt to think that men, when they come to examine them, find their *simple ideas* all generally to agree, though in discourse with one another they perhaps confound one another with different names. I imagine that *men* who abstract their thoughts, and do well examine the *ideas* of their own minds, *cannot much differ in thinking*; however, they may perplex themselves with words, according to the way of speaking of the several schools or sects they have been bred up in: though amongst unthinking men, who examine not scrupulously and carefully their own *ideas*, and strip them not from the marks men use for them, but confound them with words, there must be endless dispute, wrangling, and jargon: especially if they be learned bookish men, devoted to some sect, and accustomed to the language of it, and have learned to talk after others. But if it should happen, that any two thinking men should really have different *ideas*, I do not see how they could discourse or argue one with another. Here I must not be mistaken to think, that every floating imagination in men's brains is presently of that sort of *ideas* I speak of. It is not easy for the mind to put off those confused notions and prejudices it has imbibed from custom, inadvertency, and common conversation: it requires pains and assiduity to examine its *ideas*, till it resolves them into those clear and distinct simple ones out of which they are

compounded; and to see which amongst its simple ones, have or have not a necessary connection and dependance one upon another. Till a man doth this in the primary and original notions of things, he builds upon floating and uncertain principles, and will often find himself at a loss.

CHAP. XIV.

OF DURATION, AND ITS SIMPLE MODES.

§ 1. *Duration is fleeting Extension.*

THERE is another sort of distance or length, the *idea* whereof we get not from the permanent parts of space, but from the fleeting and perpetually perishing parts of succession. This we call *duration*, the simple modes whereof are any different lengths of it, whereof we have distinct *ideas*, as *hours, days, years, &c. time and eternity.*

§ 2. *Its Idea from Reflection on the Train of our Ideas.*

THE answer of a great man, to one who asked what time was, *Si non rogas intelligo* (which amounts to this, the more I set myself to think of it, the less I understand it), might perhaps persuade one, that *time*, which reveals all other things, is itself not to be discovered. *Duration, time, and eternity*, are, not without reason, thought to have something very abstruse in their nature. But however remote these may seem from our comprehension, yet if we trace them right to their originals, I doubt not but one of those sources of all our knowledge, viz. *sensation and reflection*, will be able to furnish us with these *ideas*, as clear and distinct as many other which are thought much less obscure; and we shall find, that the *idea* of eternity itself is derived from the same common original with the rest of our *ideas*.

§ 3.

To understand time and eternity aright, we ought with attention to consider what *idea* it is we have of *duration*, and how we came by it. It is evident to any one,

who will but observe what passes in his own mind, that there is a train of *ideas*, which constantly succeed one another in his understanding, as long as he is awake. *Reflection* on these appearances of several *ideas*, one after another, in our minds, is that which furnishes us with the *idea* of *succession*: and the distance between any parts of that succession, or between the appearance of any two *ideas* in our minds, is that we call *duration*. For whilst we are thinking, or whilst we receive successively several *ideas* in our minds, we know that we do exist; and so we call the existence, or the continuation of the existence of ourselves, or any thing else commensurate to the succession of any *ideas* in our minds, the *duration* of ourselves, or any such other thing co-existing with our thinking.

§ 4.

THAT we have our notion of *succession* and *duration* from this original, viz. from reflection on the train of *ideas* which we find to appear one after another in our minds, seems plain to me, in that we have no perception of *duration*, but by considering the train of *ideas* that take their turns in our understandings. When that succession of *ideas* ceases, our perception of duration ceases with it; which every one clearly experiments in himself, whilst he sleeps soundly, whether an hour or a day, a month, or a year; of which duration of things, whilst he sleeps or thinks not, he has no perception at all, but it is quite lost to him: and the moment wherein he leaves off to think, till the moment he begins to think again, seems to him to have no distance. And so I doubt not, it would be to a waking man, if it were possible for him to keep only one *idea* in his mind, without variation and the succession of others: And we see, that one who fixes his thoughts very intently on one thing, so as to take but little notice of the succession of *ideas* that pass in his mind, whilst he is taken up with that earnest contemplation, lets slip out of his account a good part of that duration, and thinks that time shorter than it is. But if sleep commonly unites the distant parts of duration, it is because during that time we have

no succession of *ideas* in our minds. For if a man, during his sleep, dreams, and variety of *ideas* make themselves perceptible in his mind, one after another, he hath then, during such a dreaming, a sensation of *duration*, and of the length of it; by which it is to me very clear, that men derive their *ideas* of duration from their *reflection on the train of the ideas* they observe to succeed one another in their own understandings; without which observation they can have no notion of *duration*, whatever may happen in the world.

§ 5. *The Ideas of duration applicable to things whilst we sleep.*

INDEED a man having, from reflecting on the succession and number of his own thoughts, got the notion or *idea* of *duration*, he can apply that notion to things which exist while he does not think; as he that has got the *idea* of extension from bodies by his sight or touch, can apply it to distances, where no body is seen or felt. And therefore, though a man has no perception of the length of duration, which passed whilst he slept or thought not; yet having observed the revolution of days and nights, and found the length of their duration to be in appearance regular and constant, he can, upon the supposition that that revolution has proceeded after the same manner, whilst he was asleep or thought not, as it used to do at other times; he can, I say, imagine and make allowance for the length of *duration* whilst he slept. But if Adam and Eve (when they were alone in the world), instead of their ordinary night's sleep, had passed the whole twenty-four hours in one continued sleep, the duration of that twenty-four hours had been irrecoverably lost to them, and been for ever left out of their account of time.

§ 6. *The Idea of Succession not from Motion.*

THUS, by reflecting on the appearing of various *ideas* one after another in our understandings, we get the notion of *succession*; which if any one should think we did rather get from our observation of motion by our senses, he will perhaps be of my mind, when he considers, that even motion produces in his mind an *idea* of succession,

no otherwise than as it produces there a continued train of distinguishable ideas. For a man, looking upon a body really moving, perceives yet no motion at all, unless that motion produces a constant train of *successive* ideas, *v. g.* a man becalmed at sea, out of sight of land, in a fair day, may look on the sun, or sea, or ship, a whole hour together, and perceive no motion at all in either; though it be certain, that two, and perhaps all of them, have moved during that time a great way. But as soon as he perceives either of them to have changed distance with some other body, as soon as this motion produces any new *idea* in him, then he perceives that there has been motion. But wherever a man is with all things at rest about him, without perceiving any motion at all; if during this hour of quiet he has been thinking, he will perceive the various *ideas* of his own thoughts in his own mind, appearing one after another, and thereby observe and find succession where he could observe no motion.

§ 7.

AND this, I think, is the reason, *why motions very slow*, though they are constant, *are not perceived* by us; because, in their remove from one sensible part towards another, their change of distance is so slow, that it causes no new *ideas* in us, but a good while one after another: and so not causing a constant train of new *ideas* to follow one another immediately in our minds, we have no perception of motion; which consisting in a constant succession, we cannot perceive that succession without a constant succession of varying *ideas* arising from it.

§ 8.

ON the contrary, *things that move* so swift as not to affect the senses distinctly with several distinguishable distances of their motion, and so cause not any train of *ideas* in the mind, *are not also perceived* to move: For any thing that moves round about in a circle, in less time than our *ideas* are wont to succeed one another in our minds, is not perceived to move; but seems to be a per-

fect entire circle of that matter or colour, and not a part of a circle in motion.

§ 9. *The Train of Ideas has a certain degree of Quickness.*

HENCE I leave it to others to judge, whether it be not probable that our *ideas* do, whilst we are awake, succeed one another in our minds at certain distances, not much unlike the images in the inside of a lanthorn, turned round by the heat of a candle. This appearance of theirs in train, though perhaps it may be sometimes faster and sometimes slower, yet, I guess, varies not very much in a waking man. There seem to be *certain bounds to the quickness and slowness of the succession of those ideas* one to another in our minds, beyond which they can neither delay nor hasten.

§ 10.

THE reason I have for this odd conjecture, is from observing, that in the impressions made upon any of our senses, we can but to a certain degree perceive any succession; which, if exceeding quick, the sense of succession is lost, even in cases where it is evident that there is a real succession. Let a cannon-bullet pass through a room, and in its way take with it any limb, or fleshy parts of a man; it is as clear as any demonstration can be, that it must strike successively the two sides of the room: It is also evident, that it must touch one part of the flesh first; and another after, and so in succession: And yet I believe nobody, who ever felt the pain of such a shot, or heard the blow against the two distant walls, could perceive any succession, either in the pain or sound of so swift a stroke. Such a part of duration as this, wherein we perceive no succession, is that which we may call an *instant*, and is *that which takes up the time of only one idea* in our minds, without the succession of another, wherein therefore we perceive no succession at all.

§ 11.

THIS also happens, *where the motion is so slow* as not to supply a constant train of fresh *ideas* to the senses, as fast as the mind is capable of receiving new ones.

into it; and so other *ideas* of our own thoughts, having room to come into our minds, between those offered to our senses by the moving body, *there the sense of motion is lost*; and the body, though it really moves, yet not changing perceivable distance with some other bodies, as fast as the *ideas* of our own minds do naturally follow one another in train, the thing seems to stand still, as is evident in the hands of clocks and shadows of sundials, and other constant but slow motions; where, though, after certain intervals, we perceive by the change of distance that it hath moved, yet the motion itself we perceive not.

§ 12. *This train the Measure of other successions.*

So that to me it seems, that *the constant and regular succession of ideas* in a waking man, is, as it were, *the measure and standard of all other successions*, whereof if any one either exceeds the pace of our *ideas*, as where two sounds or pains, &c. take up in their succession the duration of but one *idea*, or else where any motion or succession is so slow as that it keeps not pace with the *ideas* in our minds, or the quickness in which they take their turns; as when any one or more *ideas*, in their ordinary course, come into our mind, between those which are offered to the sight by the different perceptible distances of a body in motion, or between sounds or smells following one another, there also the sense of a constant continued succession is lost, and we perceive it not but with certain gaps of rest between.

§ 13. *The Mind cannot fix long on one invariable Idea.*

IF it be so that the *ideas* of our minds, whilst we have any there, do constantly change and shift in a continual succession, it would be impossible, may any one say, for a man to think long of any one thing. By which, if it be meant that a man may *have one self-same single idea a long time alone in his mind, without any variation at all*, I think, in matter of fact, it is *not possible*; for which (not knowing how the *ideas* of our minds are framed, of what materials they are made, whence they have their light, and how they come to make their appearances), I can give no other reason

but experience : And I would have any one try whether he can keep one unvaried single *idea* in his mind, without any other, for any considerable time together.

§ 14.

FOR trial, let him take any figure, any degree of light or whiteness, or what other he pleases ; and he will, I suppose, find it difficult to keep all other *ideas* out of his mind : But that some, either of another kind, or various consideration of that *idea* (each of which considerations is a new *idea*), will constantly succeed one another in his thoughts, let him be as wary as he can.

§ 15.

ALL that is in a man's power in this case, I think, is only to mind and observe what the *ideas* are, that take their turns in his understanding ; or else to direct the sort, and call in such as he hath a desire or use of : But hinder the *constant succession* of fresh ones, I think he cannot, though he may commonly choose whether he will heedfully observe and consider them.

§ 16. *Ideas however made, include no Sense of Motion.* WHETHER these several *ideas* in a man's mind be made by certain motions, I will not here dispute ; but this I am sure, that they include no *idea* of motion in their appearance ; and if a man had not the *idea* of motion otherwise, I think he would have none at all : which is enough to my present purpose, and sufficiently shows, that the notice we take of the *ideas* of our own minds, appearing there one after another, is that which gives us the *idea* of succession and duration, without which we should have no such *ideas* at all. It is not then motion, but the constant train of *ideas* in our minds, whilst we are waking, that furnishes us with the *idea* of duration, whereof motion no otherwise gives us any perception, than as it causes in our minds a constant succession of *ideas*, as I have before showed : And we have as clear an *idea* of succession and duration, by the train of other *ideas* succeeding one another in our minds, without the *idea* of any motion, as by the train of *ideas* caused by the uninterrupted sensible change of distance between two bodies, which we have from motion ; and

therefore we should as well have the *idea* of duration, were there no sense of motion at all.

§ 17. *Time is Duration set out by Measures.*

HAVING thus got the *idea* of duration, the next thing natural for the mind to do, is to get some *measure* of this common *duration*, whereby it might judge of its different lengths, and consider the distinct order wherein several things exist, without which a great part of our knowledge would be confuted, and a great part of history be rendered very useless. This consideration of duration, as set out by certain periods, and marked by certain measures or *epochs*, is that, I think, which most properly we call *time*.

§ 18. *A good Measure of Time must divide its whole Duration into equal Periods.*

IN the measuring of extension, there is nothing more required but the application of the standard or measure we make use of to the thing, of whose extension we would be informed. But in the measuring of duration this cannot be done, because no two different parts of succession can be put together to measure one another: And nothing being a *measure of duration* but duration, as nothing is of extension but extension, we cannot keep by us any standing unvarying measure of duration, which consists in a constant fleeting succession, as we can of certain lengths of extension, as inches, feet, yards, &c. marked out in permanent parcels of matter. Nothing then could serve well for a convenient measure of time, but what has divided the whole length of its duration into apparently equal portions, by constantly repeated periods. What portions of duration are not distinguished, or considered as distinguished and measured by such periods, come not so properly under the notion of time, as appears by such phrases as these, viz. *before all time, and when time shall be no more.*

§ 19. *The Revolutions of the Sun and Moon the properest Measures of Time.*

THE diurnal and annual *revolutions of the sun*, as having been, from the beginning of nature, constant, regular, and universally observable by all mankind, and

supposed equal to one another, have been with reason *made use of for the measure of duration*. But the distinction of days and years having depended on the motion of the sun, it has brought this mistake with it, that it has been thought that motion and duration were the measure one of another: For men, in the *measuring of the length of time*, having been accustomed to the *ideas* of minutes, hours, days, months, years, &c. which they found themselves upon any mention of time or duration presently to think on, all which portions of time were measured out by the motion of those heavenly bodies; they were apt to confound time and motion, or, at least, to think that they had a necessary connection one with another: whereas any constant periodical appearance, or alteration of *ideas* in seemingly equidistant spaces of duration, if constant and universally observable, would have as well distinguished the intervals of time, as those that have been made use of. For supposing the sun, which some have taken to be a fire, had been lighted up at the same distance of time that it now every day comes about to the same meridian, and then gone out again about twelve hours after, and that in the space of an annual revolution, it had sensibly increased in brightness and heat, and so decreased again; would not such regular appearances serve to measure out the distances of duration to all that could observe it, as well without as with motion? For if the appearances were constant, universally observable, and in equidistant periods, they would serve mankind for measure of time as well, were the motion away.

§ 20. *But not by their Motion, but periodical Appearances.*

FOR the freezing of water, or the blowing of a plant, returning at equidistant periods in all parts of the earth, would as well serve men to reckon their years by as the motions of the sun: And in effect we see, that some people in America counted their years by the coming of certain birds amongst them at their certain seasons, and leaving them at others. For a fit of an ague, the sense of hunger or thirst, a smell or a taste, or any

other *idea* returning constantly at equidistant periods, and making itself universally be taken notice of, *would* not fail to *measure* out the course of succession, and distinguish the distances of *time*. Thus we see that men born blind count time well enough by years, whose revolutions yet they cannot distinguish by motions, that they perceive not: And I ask, Whether a blind man, who distinguished his years either by the heat of summer, or cold of winter; by the smell of any flower of the spring, or taste of any fruit of the autumn; would not have a better measure of time than the Romans had before the reformation of their calendar by Julius Cæsar, or many other people, whose years, notwithstanding the motion of the sun, which they pretend to make use of, are very irregular? And it adds no small difficulty to chronology, that the exact lengths of the years that several nations counted by, are hard to be known, they differing very much one from another, and I think I may say all of them from the precise motions of the sun. And if the sun moved from the creation to the flood constantly in the equator, and so equally dispersed its light and heat to all the habitable parts of the earth, in days all of the same length, without its annual variations to the tropics, as a late ingenious author supposes; I do not think it very easy to imagine, that (notwithstanding the motion of the sun) men should in the antediluvian world from the beginning count by years, or measure their time by periods, that had no sensible marks very obvious to distinguish them by.

§ 21. *No two Parts of Duration can be certainly known to be equal.*

BUT perhaps it will be said, without a regular motion, such as of the sun, or some other, how could it ever be known that such periods were equal? To which I answer, the equality of any other returning appearances might be known by the same way that that of days was known, or presumed to be so at first; which was only by judging of them by the train of *ideas* which had passed in men's minds in the intervals: by which

train of *ideas* discovering inequality in the natural days, but none in the artificial days or *Nυχθημερα* were guessed to be equal, which was sufficient to make them serve for a measure. Though exacter search has since discovered inequality in the diurnal revolutions of the sun, and we know not whether the annual also be not unequal: These yet, by their presumed and apparent equality, serve as well to reckon time by (though not to measure the parts of duration exactly), as if they could be proved to be exactly equal. We must therefore carefully distinguish betwixt duration itself, and the measures we make use of to judge of its length. Duration in itself is to be considered as going on in one constant, equal, uniform course: But none of the measures of it, which we make use of, can be known to do so; nor can we be assured, that their assigned parts or periods are equal in duration one to another; for two successive lengths of duration, however measured, can never be demonstrated to be equal. The motion of the sun, which the world used so long and so confidently for an exact measure of duration, has, as I said, been found in its several parts unequal: And though men have of late made use of a pendulum, as a more steady and regular motion than that of the sun, or (to speak more truly) of the earth; yet if any one should be asked how he certainly knows that the two successive swings of a pendulum are equal, it would be very hard to satisfy him that they are infallibly so: Since we cannot be sure, that the cause of that motion, which is unknown to us, shall always operate equally; and we are sure that the medium in which the pendulum moves, is not constantly the same: Either of which varying, may alter the equality of such periods, and thereby destroy the certainty and exactness of the measure by motion, as well as any other periods of other appearances; the notion of duration still remaining clear, though our measures of it cannot any of them be demonstrated to be exact. Since then no two portions of succession can be brought together, it is impossible ever certainly to know their equality. All that we

can do for a measure of time, is to take such as have continual successive appearances at seemingly equidistant periods; of which *seeming equality we have no other measure, but such as the train of our own ideas* have lodged in our memories, with the concurrence of other probable reasons, to persuade us of their equality.

§ 22. *Time not the Measure of Motion.*

ONE thing seems strange to me, that whilst all men manifestly measured time by the motion of the great and visible bodies of the world, time yet should be *designed* to be the *measure of motion*; whereas it is obvious to every one who reflects ever so little on it, that to measure motion, space is as necessary to be considered as time; and those who look a little farther, will find also the bulk of the thing moved necessary to be taken into the computation, by any one who will estimate or measure motion, so as to judge right of it. Nor indeed does motion any otherwise conduce to the measuring of duration, than as it constantly brings about the return of certain sensible *ideas*, in seeming equidistant periods. For, if the motion of the sun were as unequal as of a ship driven by unsteady winds, sometimes very slow, and at others irregularly very swift; or if being constantly equally swift, it yet was not circular, and produced not the same appearances, it would not at all help us to measure time, any more than the seeming unequal motion of a comet does.

§ 23. *Minutes, Hours and Years, not necessary Measures of Duration.*

MINUTES, hours, days, and years, are then no more necessary to time or duration, than inches, feet, yards and miles, marked out in any matter, are to extension: For though we in this part of the universe, by the constant use of them, as of periods set out by the revolutions of the sun, or as known parts of such periods, have fixed the *ideas* of such lengths of duration in our minds, which we apply to all parts of time, whose lengths we would consider; yet there may be other parts of the universe, where they no more use these

measures of ours, than in Japan they do our inches, feet or miles; but yet something analogous to them there must be. For without some regular periodical returns, we could not measure ourselves, or signify to others the length of any duration, though at the same time the world were as full of motion as it is now, but no part of it disposed into regular and apparently equidistant revolutions. But the different measures that may be made use of for the account of time, do not at all alter the notion of duration, which is the thing to be measured; no more than the different standards of a foot and a cubit alter the notion of extension to those who make use of those different measures.

§ 25. *Our Measure of Time applicable to Duration before Time.*

THE mind having once got such a measure of time as the annual revolution of the sun, can apply that measure to duration, wherein that measure itself did not exist, and with which, in the reality of its being, it had nothing to do: For should one say, that Abraham was born in the 2712th year of the Julian period, it is altogether as intelligible, as reckoning from the beginning of the world, though there were so far back no motion of the sun, nor any other motion at all. For though the Julian period be supposed to begin several hundred years before there were really either days, nights, or years, marked out by any revolutions of the sun; yet we reckon as right, and thereby measure duration as well, as if really at that time the sun had existed, and kept the same ordinary motion it doth now. The *idea of duration equal to an annual revolution of the sun*, is as easily applicable in our thoughts to duration, where no sun nor motion was, as the *idea of a foot or yard*, taken from bodies here, can be applied in our thoughts to distances beyond the confines of the world, where are no bodies at all.

§ 26.

FOR supposing it were 5639 miles, or millions of miles, from this place to the remotest body of the universe (for being finite, it must be at a certain distance), as we suppose it to be 5639 years from this time to the first existence of any body in the beginning of the world; *we can*, in our thoughts, *apply this measure of a year to duration before the creation*, or beyond the duration of bodies or motion, as we can this measure of a mile to space beyond the utmost bodies; and by the one measure duration, where there was no motion, as well as by the other measure space in our thoughts, where there is no body.

§ 27.

IF it be objected to me here, that in this way of explaining of time, I have begged what I should not, viz. that the world is neither eternal nor infinite, I answer, That to my present purpose it is not needful, in this place, to make use of arguments, to evince the world to be finite, both in duration and extension; but it being at least as conceivable as the contrary, I have certainly the liberty to suppose it, as well as any one hath to suppose the contrary: And I doubt not but that *every one* that will go about it, may easily *conceive* in his mind *the beginning of motion, though not of all duration*, and so may come to a stop and *non ultra* in his consideration of motion. So also in his thoughts he may set limits to body, and the extension belonging to it, but not to space where no body is; the utmost bounds of space and duration being beyond the reach of thought, as well as the utmost bounds of number are beyond the largest comprehension of the mind; and all for the same reason, as we shall see in another place.

§ 28. *Eternity.*

By the same means, therefore, and from the same original that we come to have *the idea* of time, we have also that *idea* which we call *eternity*: viz. having got the *idea* of succession and duration, by reflecting on the train of our own *ideas* caused in us either by the natural appearances of those *ideas* coming constantly of

themselves into our waking thoughts, or else caused by external objects successively affecting our senses; and having from the revolutions of the sun got the *ideas* of certain lengths of duration, we can, in our thoughts, add such lengths of duration to one another as often as we please, and apply them, so added, to durations past or to come: And this we can continue to do on, without bounds or limits, and proceed *in infinitum*, and apply thus the length of the annual motion of the sun to duration, supposed before the sun's, or any other motion had its being; which is no more difficult or absurd, than to apply the notion I have of the moving of a shadow one hour to-day upon the sun-dial, to the duration of something last night, *v. g.* the burning of a candle, which is now absolutely separate from all actual motion: And it is impossible for the duration of that flame for an hour last night to co-exist with any motion that now is, or ever shall be, as for any part of duration, that was before the beginning of the world, to co-exist with the motion of the sun now. But yet this hinders not, but that having the *idea* of the length of the motion of the shadow on a dial between the marks of two hours, I can as distinctly measure in my thoughts the duration of that candle-light last night, as I can the duration of any thing that does now exist: And it is no more than to think, that had the sun shone then on the dial, and moved after the same rate it doth now, the shadow on the dial would have passed from one hour-line to another, whilst that flame of the candle lasted.

§ 29.

THE notion of an hour, day, or year, being only the *idea* I have of the length of certain periodical regular motions, neither of which motions do ever all at once exist, but only in the *ideas* I have of them in my memory, derived from my senses or reflection, I can with the same ease, and for the same reason, apply it in my thoughts to duration, antecedent to all manner of motion, as well as to any thing that is but a minute, or a day, antecedent to the motion, that at this very moment the sun is in. All things past are equally and

perfectly at rest ; and to this way of consideration of them are all one, whether they were before the beginning of the world, or but yesterday ; *the measuring of any duration* by some motion, *depending* not at all on the real co-existence of that thing to that motion, or any other periods of revolution, but the having *a clear idea of the length of some periodical known motion*, or other intervals of *duration* in my mind, and *applying that to the duration of the thing I would measure.*

§ 30.

HENCE we see, that some men imagine the duration of the world, from its first existence to this present year 1689, to have been 5639 years, or equal to 5639 annual revolutions of the sun, and others a great deal more ; as the Egyptians of old, who, in the time of Alexander, counted 23,000 years from the reign of the sun ; and the Chineses now, who account the world 3,269,000 years old, or more ; which longer duration of the world, according to their computation, though I should not believe to be true, yet I can equally imagine it with them, and as truly understand, and say, one is longer than the other, as I understand, that Methusalem's life was longer than Enoch's. And if the common reckoning of 5639 should be true (as it may be as well as any other assigned), it hinders not at all my imagining what others mean, when they make the world 1000 years older, since every one may with the same facility to imagine (I do not say believe) the world to be 50,000 years old, as 5639 ; and may as well conceive the duration of 50,000 years, as 5639. Whereby it appears, that *to the measuring the duration of any thing by time*, it is not requisite that that thing should be co-existent to the motion we measure by, or any other periodical revolution ; but *it suffices* to this purpose, *that we have the idea of the length of any regular periodical appearances*, which we can in our minds apply to duration, with which the motion or appearance never co-existed.

§ 31.

FOR as, in the history of the creation delivered by Moses, I can imagine, that light existed three days before

the sun was, or had any motion, barely by thinking, that the duration of light before the sun was created, was so long as (if the sun had moved then as it doth now) would have been equal to three of his diurnal revolutions; so, by the same way, I can have an *idea* of the *chaos*, or angels, being created, before there was either light, or any continued motion, a minute, an hour, a day, a year, or 1000 years. For if I can but consider *duration* equal to one minute, before either the being or motion of any body, I can add one minute more till I come to sixty; and by the same way of adding minutes, hours, or years (*i. e.* such or such parts of the sun's revolution, or any other period whereof I have the *idea*), proceed *in infinitum*, and suppose a duration exceeding as many such parts as I can reckon, let me add whilst I will; which I think is the notion we have of *eternity*, of whose infinity we have no other notion than we have of the infinity of number, to which we can add for ever without end.

§ 32.

AND thus I think it is plain, that *from* those two fountains of all knowledge before mentioned, viz. *reflection* and *sensation*, we get the ideas of *duration*, and the measures of it.

For, *first*, By observing what passes in our minds, how our *ideas* there in train constantly some vanish, and others begin to appear, we come by the *idea* of *succession*.

Secondly, By observing a distance in the parts of this succession, we get the *idea* of *duration*.

Thirdly, By sensation observing certain appearances, at certain regular and seeming equidistant periods, we get the *ideas* of certain lengths or *measures of duration*, as minutes, hours, days, years, &c.

Fourthly, By being able to repeat those measures of time, our *ideas* of stated length of duration in our minds, as often as we will, we can come to *imagine duration*, where nothing does really endure or exist; and thus we imagine to-morrow, next year, or seven years hence.

Fifthly, By being able to repeat any such *idea* of any length of time, as of a minute, a year, or an age, as often as we will in our own thoughts, and adding them to one another, without ever coming to the end of such addition, any nearer than we can to the end of number, to which we can always add, we come by the *idea* of *eternity*, as the future eternal duration of our souls, as well as the eternity of that infinite Being, which must necessarily have always existed.

Sixthly, By considering any part of infinite duration, as set out by periodical measures, we come by the *idea* of what we call *time* in general.

CHAP. XV.

OF DURATION AND EXPANSION, CONSIDERED TOGETHER.

§ 1. *Both capable of greater and less.*

THOUGH we have, in the precedent chapters, dwelt pretty long on the considerations of space and duration, yet they being *ideas* of general concernment, that have something very abstruse and peculiar in their nature, the comparing them one with another may perhaps be of use for their illustration; and we may have the more clear and distinct conception of them, by taking a view of them together. Distance or space, in its simple abstract conception, to avoid confusion, I call *expansion*, to distinguish it from *extension*, which by some is used to express this distance only, as it is in the solid parts of matter, and so includes, or at least intimates, the *idea* of body: Whereas the *idea* of pure distance includes no such thing. I prefer also the word *expansion* to *space*, because *space* is often applied to distance of fleeting successive parts, which never exist together, as well as to those which are permanent. In both these (viz. *expansion* and *duration*), the mind has this common *idea* of continued lengths, capable of greater or less quantities: For a man has as clear an *idea* of

the difference of the length of an hour, and a day, as of an inch and a foot.

§ 2. *Expansion not bounded by Matter.*

THE *mind*, having got the *idea* of the length of any part of *expansion*, let it be a span, or a pace, or what length you will, *can*, as has been said, repeat that *idea*; and so, adding it to the former, *enlarge its idea of length*, and make it equal to two spans, or two paces; and so as often as it will, till it equals the distance of any parts of the earth one from another, and increase thus, till it amounts to the distance of the sun, or remotest star. By such a progression as this setting out from the place where it is, or any other place, it can proceed and pass beyond all those lengths, and find nothing to stop its going on, either in or without body. It is true, we can easily in our thoughts come to the end of solid extension; the extremity and bounds of all body, we have no difficulty to arrive at: But when the mind is there, it finds nothing to hinder its progress into this endless expansion; of that it can neither find nor conceive any end. Nor let any one say, that beyond the bounds of body, there is nothing at all, unless he will confine GOD within the limits of matter. Solomon, whose understanding was filled and enlarged with wisdom, seems to have other thoughts, when he says, *Heaven, and the heaven of heavens, cannot contain thee*: And he, I think, very much magnifies to himself the capacity of his own understanding, who persuades himself, that he can extend his thoughts farther than GOD exists, or imagine any expansion where he is not.

§ 3. *Nor Duration by Motion.*

JUST so is it in duration. *The mind having got the idea of any length of duration, can double, multiply, and enlarge it*, not only beyond its own, but beyond the existence of all corporeal beings, and all the measures of time, taken from the great bodies of the world, and their motions. But yet every one easily admits, that though we make duration boundless, as certainly it is, we cannot yet extend it beyond all being. GOD, every one easily allows, fills eternity; and it is hard to find a rea-

son why any one should doubt, that he likewise fills immensity? His infinite being is certainly as boundless one way as another; and methinks it ascribes a little too much to matter, to say, where there is no body, there is nothing.

§ 4. *Why Men more easily admit infinite Duration, than infinite Expansion.*

HENCE, I think, we may learn the reason *why every one* familiarly, and without the least hesitation, speaks of, and supposes eternity, and sticks not to *ascribe infinity to duration*; but it is *with more doubting* and reserve, that many admit, or suppose *the infinity of space*. The reason whereof seems to me to be this, that duration and extension being used as names of affections belonging to other beings, we easily conceive in GOD infinite duration; and we cannot avoid doing so: But not attributing to him extension, but only to matter, which is finite, we are apt to doubt of the existence of expansion without matter; of which alone we commonly suppose it an attribute. And therefore, when men pursue their thoughts of space, they are apt to stop at the confines of body; as if space were there at an end too, and reached no farther. Or if their *ideas*, upon consideration, carry them farther, yet they term what is beyond the limits of the universe, imaginary space; as if it were nothing, because there is no body existing in it. Whereas duration, antecedent to all body, and to the motions which it is measured by, they never term imaginary; because it is never supposed void of some other real existence. And if the names of things may at all direct our thoughts towards the originals of men's *ideas* (as I am apt to think they may very much), one may have occasion to think, by the name *duration*, that the continuation of existence, with a kind of resistance to any destructive force, and the continuation of solidity (which is apt to be confounded with, and if we will look into the minute anatomical parts of matter, is little different from hardness), were thought to have some analogy, and gave occasion to words so near of kin as *durare* and *durum esse*. And that *durare*

is applied to the *idea* of hardness, as well as that of existence, we see in Horace, *Epod. 16. ferro duravit sacula*. But be that as it will, this is certain, that whoever pursues his own thoughts, will find them sometimes launch out beyond the extent of body into the infinity of space or expansion; the *idea* whereof is distinct and separate from body, and all other things: which may (to those who please) be a subject of farther meditation.

§ 5. *Time to Duration is as Place to Expansion.*

TIME in general is to *duration*, as *place* to *expansion*. They are so much of those boundless oceans of eternity and immensity, as is set out and distinguished from the rest, as it were by land-marks; and so are made use of to denote the position of finite real beings, in respect one to another, in those uniform infinite oceans of duration and space. These, rightly considered, are only *ideas* of determinate distances, from certain known points fixed in distinguishable sensible things, and supposed to keep the same distance one from another. From such points fixed in sensible beings we reckon, and from them we measure our portions of those infinite quantities; which, so considered, are that which we call *time* and *place*. For duration and *space* being in themselves uniform and boundless, the order and position of things, without such known settled points, would be lost in them, and all things would lie jumbled in an incurable confusion.

§ 6. *Time and Place are taken for so much of either, as are set out by the Existence and Motion of Bodies.*

TIME and *place* taken thus for determinate distinguishable portions of those infinite abysses of space and duration, set out, or supposed to be distinguished from the rest by marks, and known boundaries, have each of them a twofold acceptance.

FIRST, *Time* in general is commonly taken for so much of infinite duration, as is measured out by, and co-existent with, the existence and motions of the great bodies of the universe, as far as we know any thing of them: And in this sense, time begins and ends with the

frame of this sensible world, as in these phrases before mentioned, *before all time*, or *when time shall be no more*: *Place* likewise is taken sometimes for that portion of infinite space, which is possessed by, and comprehended within the material world; and is thereby distinguished from the rest of expansion; though this may more properly be called *extension* than place. Within these two are confined, and by the observable parts of them are measured and determined the particular time or duration, and the particular extension and place, of all corporeal beings.

§ 7. *Sometimes for so much of either, as we design by Measures taken from the Bulk or Motion of Bodies.*

SECONDLY, Sometimes the word *time* is used in a larger sense, and is applied to parts of that infinite duration, not that were really distinguished and measured out by this real existence, and periodical motions of bodies, that were appointed from the beginning to be for signs, and for seasons, and for days, and years, and are accordingly our measures of time, but such other portions, too, of that infinite uniform duration, which we, upon any occasion, do suppose equal to certain lengths of measured time: and so consider them as bounded and determined. For if we should suppose the creation, or fall of the angels, was at the beginning of the Julian period, we should speak properly enough, and should be understood, if we said, it is a longer time since the creation of angels than the creation of the world, by 764 years; whereby we would mark out so much of that undistinguished duration, as we suppose equal to, and would have admitted 764 annual revolutions of the sun, moving at the rate it now does. And thus likewise we sometimes speak of place, distance, or bulk, in the great *inane* beyond the confines of the world, when we consider so much of that space as is equal to, or capable to receive a body of any assigned dimensions, as a cubic foot: or do we suppose a point in it at such a certain distance from any part of the universe.

§ 8. *They belong to all Beings.*

WHERE and *when*, are questions belonging to all finite existences, and are by us always reckoned from some known parts of this sensible world, and from some certain epochs marked out to us by the motions observable in it. Without some such fixed parts or periods, the order of things would be lost to our finite understandings, in the boundless invariable oceans of duration and expansion; which comprehend in them all finite beings, and in their full extent belong only to the Deity. And therefore we are apt not to wonder that we comprehend them not, and do so often find our thoughts at a loss, when we would consider them either abstractly in themselves, or as any way attributed to the first incomprehensible Being. But when applied to any particular finite beings, the extension of any body is so much of that infinite space, as the bulk of that body takes up. And place is the position of any body, when considered at a certain distance from some other. As the *idea* of the particular *duration* of any thing is an *idea* of that portion of infinite *duration* which passes during the existence of that thing; so the time *when* the thing existed is the *idea* of that space of duration which passed between some known and fixed period of duration and the being of that thing. One shows the *distance* of the extremities of the bulk or existence of the same thing, as that it is a foot square, or lasted two years; the other shows the *distance* of it in place, or existence, from other fixed points of space or duration, as that it was in the middle of Lincolns-Inn-Fields, or the first degree of Taurus, and in the year of our Lord 1671, or the 1000th year of the Julian period: All which distances we measure by preconceived *ideas* of certain lengths of space and duration, as inches, feet, miles, and degrees; and in the other minutes, days, and years, &c.

§ 9. *All the Parts of Extension, are Extension; and all the Parts of Duration, are Duration.*

THERE is one thing more wherein *space* and *duration* have a great conformity; and that is, though they are

justly reckoned amongst our *simple ideas*, yet none of the distinct *ideas* we have of either is without all manner of *composition* * ; it is the very nature of both of them to consist of parts : but their parts being all of the same kind, and without the mixture of any other *idea*, hinder them not from having a place amongst *simple ideas*. Could the mind, as in number, come to so small a part of extension or duration, as excluded divisibility, that would be, as it were, the indivisible unit, or *idea* ; by repetition of which, it would make its more enlarged *ideas* of extension and duration. But since the mind is not able to frame an *idea* of any space without parts ; instead thereof it makes use of the common measures, which, by familiar use in each country, have imprinted themselves on the memory (as inches and feet ; or cubits, and parasangs ; and so seconds, minutes, hours, days, and years in duration) : The mind makes

* It has been objected to Mr. Locke, that if space consists of parts, as it is confessed in this place, he should not have reckoned it in the number of *simple ideas* ; because it seems to be inconsistent with what he says elsewhere, that a *simple idea* is *uncompounded*, and contains in it nothing but one uniform appearance or conception of the mind, and is not distinguishable into different ideas. It is farther objected, that Mr. Locke has not given in the 11th chapter of the 2d book, where he begins to speak of *simple ideas*, an exact definition of what he understands by the word *simple ideas*. To these difficulties Mr. Locke answers thus : To begin with the last, he declares, that he has not treated his subject in an order perfectly scholastic, having not had much familiarity with those sort of books during the writing of his, and not remembering at all the method in which they are written ; and therefore his readers ought not to expect definitions regularly placed at the beginning of each new subject. Mr. Locke contents himself to employ the principal terms that he uses ; so that, from his use of them, the reader may easily comprehend what he means by them. But with respect to the term *simple idea*, he has had the good luck to define that in the place cited in the objection ; and therefore there is no reason to supply that defect. The question then is to know, whether the *idea* of *extension* agrees with this definition ? Which will effectually agree to it, if it be understood in the sense which Mr. Locke had principally in his view ; for that composition which he designed to exclude in that definition, was a composition of different *ideas* in the mind, and not a composition of the same kind in a thing whose essence consists in having parts of the same kind, where you can never come to a part entirely exempted from this composition. So that if the *idea* of *extension* consists in having *partes extra partes* (as the schools speak), it is always in the sense of Mr. Locke, a

use, I say, of such *ideas* as these, as simple ones; and these are the component parts of larger *ideas*, which the mind, upon occasion, makes by the addition of such known lengths which it is acquainted with. On the other side, the ordinary smallest measure we have of either, is looked on as an unit in number, when the mind by division would reduce them into less fractions. Though on both sides, both in addition and division, either of space or duration, when the *idea* under consideration becomes very big or very small, its precise bulk becomes very obscure and confused; and it is the number of its repeated additions or divisions, that alone remains clear and distinct, as will easily appear to any one who will let his thoughts loose in the vast expansion of space, or divisibility of matter. Every part of duration, is duration too; and every part of extension, is extension, both of them capable of addition or division *in infinitum*. But the least portions of either of

simple idea; because the *idea* of having *partes extra partes*, cannot be resolved into two other *ideas*. For the remainder of the objection made to Mr. Locke, with respect to the nature of extension, Mr. Locke was aware of it, as may be seen in § 9. chap. 15. of the 2d book, where he says, that the least portion of space or extension, whereof we have a clear and distinct *idea*, may perhaps be the fittest to be considered by us as a *simple idea* of that kind, out of which our complex modes of space and extension are made up. So that, according to Mr. Locke, it may very fitly be called a *simple idea*, since it is the least *idea* of space that the mind can form to itself, and that cannot be divided by the mind into any less, whereof it has in itself any determined perception. From whence it follows, that it is to the mind one *simple idea*; and that is sufficient to take away this objection: For it is not the design of Mr. Locke, in this place, to discourse of any thing but concerning the *ideas* of the mind. But if this is not sufficient to clear the difficulty, Mr. Locke hath nothing more to add, but that if the *idea* of extension is so peculiar, that it cannot exactly agree with the definition that he has given of those *simple ideas*, so that it differs in some manner from all others of that kind, he thinks it is better to leave it there exposed to this difficulty, than to make a new division in his favour. It is enough for Mr. Locke, that his meaning can be understood. It is very common to observe intelligible discourses spoiled by too much subtilty in nice divisions. We ought to put things together as well as we can, *doctrinæ causâ*; but after all, several things will not be bundled up together under our terms, and ways of speaking.

them, whereof we have clear and distinct *ideas*, may perhaps be fittest to be considered by us, as the simple *ideas* of that kind, out of which our complex modes of space, extension, and duration, are made up, and into which they can again be distinctly resolved. Such a small part in duration may be called a *moment*, and is the time of one *idea* in our minds in the train of their ordinary succession there. The other, wanting a proper name, I know not whether I may be allowed to call a *sensible point*, meaning thereby the least particle of matter or space we can discern, which is ordinarily about a minute, and to the sharpest eyes seldom less than thirty seconds of a circle, whereof the eye is the centre.

§ 10. *Their Parts inseparable.*

EXPANSION and duration have this farther agreement, that though they are both considered by us as having parts, yet *their parts* are *not separable* one from another, no, not even in thought: though the parts of bodies from whence we take our measure of the one, and the parts of motion, or rather the succession of *ideas* in our minds, from whence we take the measure of the other, may be interrupted and separated; as the one is often by rest, and the other is by sleep, which we call rest too.

§ 11. *Duration is as a Line, Expansion as a Solid.*

BUT yet there is this manifest difference between them, that the *ideas* of length, which we have of *expansion*, are turned every way, and so make figure and breadth, and thickness; but *duration* is but as it were the length of one straight line, extended in infinitum, not capable of multiplicity, variation, or figure; but is one common measure of all existence whatsoever, wherein all things, whilst they exist, equally partake. For this present moment is common to all things that are now in being, and equally comprehends that part of their existence, as much as if they were all but one single being; and we may truly say, they all exist in the same moment of time. Whether angels and spirits have any analogy to this in respect of expansion, is beyond my comprehen-

sion: And perhaps for us, who have understandings and comprehensions suited to our own preservation, and the ends of our own being, but not to the reality and extent of all other beings, it is near as hard to conceive any existence, or to have an *idea* of any real being, with a perfect negation of all manner of expansion, as it is to have the *idea* of any real existence, with a perfect negation of all manner of duration: And therefore what spirits have to do with space, or how they communicate in it, we know not. All that we know, is, that bodies do each singly possess its proper portion of it, according to the extent of its solid parts; and thereby exclude all other bodies from having any share in that particular portion of space, whilst it remains there.

§ 12. *Duration has never two Parts together, Expansion all together.*

DURATION, and time which is a part of it, is the *idea* we have of *perishing distance*, of which no two parts exist together, but follow each other in succession; as *expansion* is the *idea* of *lasting distance*, all whose parts exist together, and are not capable of succession. And therefore though we cannot conceive any duration without succession, nor can put it together in our thoughts, that any being does now exist to-morrow, or possess at once more than the present moment of duration; yet we can conceive the eternal duration of the Almighty far different from that of man, or any other finite being. Because man comprehends not in his knowledge or power all past and future things: His thoughts are but of yesterday, and he knows not what to-morrow will bring forth. What is once past, he can never recal, and what is yet to come, he cannot make present. What I say of man, I say of all finite beings: who, though they may far exceed man in knowledge and power, yet are no more than the meanest creature, in comparison with God himself. Finite of any magnitude, holds not any proportion to infinite. God's infinite duration being accompanied with infinite knowledge and infinite power, he sees all things past and to come; and they

are no more distant from his knowledge, no farther removed from his sight than the present: They all lie under the same view; and there is nothing which he cannot make exist each moment he pleases. For the existence of all things depending upon his good pleasure, all things exist every moment that he thinks fit to have them exist. To conclude, expansion and duration do mutually embrace and comprehend each other; every part of space being in every part of duration, and every part of duration in every part of expansion. Such a combination of two distinct *ideas*, is, I suppose, scarce to be found in all that great variety we do or can conceive, and may afford matter to farther speculation.

CHAP. XVI.

OF NUMBER.

§ 1. *Number the simplest and most universal Idea:*

AMONGST all the *ideas* we have, as there is none suggested to the mind by more ways, so there is none more simple than that of *unity*, or one. It has no shadow of variety or composition in it; every object our senses are employed about, every *idea* in our understandings, every thought of our minds, brings this *idea* along with it. And therefore it is the most intimate to our thoughts, as well as it is in its agreement to all other things, the most universal *idea* we have. For number applies itself to men, angels, actions, thoughts, every thing that either doth exist, or can be imagined.

§ 2. *Its Modes made by Addition.*

By repeating this *idea* in our minds, and adding the repetitions together, we come by the *complex ideas* of the *modes* of it. Thus by adding one to one, we have the *complex idea* of a couple; by putting twelve units together, we have the *complex idea* of a dozen; and of a score, or a million, or any other number.

§ 3. *Each Mode distinct.*

THE simple modes of number are of all other the most distinct; every the least variation, which is an unit, making each combination as clearly different from that which approacheth nearest to it, as the most remote: Two being as distinct from one, as two hundred; and the *idea* of two as distinct from the *idea* of three, as the magnitude of the whole earth is from that of a mite. This is not so in other simple modes, in which it is not so easy, nor perhaps possible for us to distinguish betwixt two approaching *ideas*, which yet are really different. For who will undertake to find a difference between the white of this paper, and that of the next degree to it; or can form distinct *ideas* of every the least excess in extension?

§ 4. *Therefore Demonstrations in Numbers the most precise.*

THE clearness and *distinctness* of each mode of number from all others even those that approach nearest, makes me apt to think that demonstrations in numbers, if they are not more evident and exact than in extension, yet they are more general in their use, and more determinate in their application. Because the *ideas* of numbers are more precise and distinguishable than in extension, where every equality and excess are not so easy to be observed or measured; because our thoughts cannot in space arrive at any determined smallness, beyond which it cannot go, as an unit; and therefore the quantity or proportion of any the least excess cannot be discovered: which is clear otherwise in number, where, as has been said, 91 is as distinguishable from 90, as from 9000, though 91 be the next immediate excess to 90. But it is not so in extension, where whatsoever is more than just a foot or an inch, is not distinguishable from the standard of a foot or an inch; and in lines which appear of an equal length, one may be longer than the other by innumerable parts; nor can any one assign an angle which shall be the next biggest to a right one.

§ 5. *Names necessary to Numbers.*

By the repeating, as has been said, of the *idea* of an unit, and joining it to another unit, we make thereof one collective *idea*, marked by the name *two*. And whosoever can do this, and proceed on, still adding one more to the last collective *idea* which he had of any number, and give a name to it, may count, or have *ideas* for several collections of units, distinguished one from another, as far as he hath a series of names for following numbers, and a memory to retain that series, with their several names: All *numeration* being but still the adding of one unit more, and giving to the whole together, as comprehended in one *idea*, a new or distinct name or sign, whereby to know it from those before and after, and distinguish it from every smaller or greater multitude of units. So that he that can add one to one, and so to two, and so go on with his tale, taking still with him the distinct names belonging to every progression; and so again, by abstracting an unit from each collection, retreat and lessen them, is capable of all the *ideas* of numbers within the compass of his language, or for which he hath names, though not perhaps of more. For the several simple modes of numbers, being in our minds but so many combinations of units, which have no variety, nor are capable of any other difference, but more or less, names or marks for each distinct combination, seem more necessary than in any other sort of *ideas*. For without such names or marks we can hardly well make use of numbers in reckoning, especially where the combination is made up of any great multitude of units; which put together without a name or mark, to distinguish that precise collection, will hardly be kept from being a heap in confusion.

§ 6. *Names necessary to Numbers.*

THIS I think to be the reason, why some Americans I have spoken with (who were otherwise of quick and rational parts enough), could not, as we do, by any means count to 1000; nor had any distinct *idea* of that number, though they could reckon very well to 20. Because their language being scanty, and accommodated

only to the few necessities of a needy simple life, unacquainted either with trade or mathematics, had no words in it to stand for 1000; so that when they were discoursed with of those greater numbers, they would show the hairs of their head, to express a great multitude which they could not number: which inability, I suppose, proceeded from their want of names. * The Tououpinambos had no names for numbers above 5; any number beyond that, they made out by showing their fingers, and the fingers of others, who were present. And I doubt not but we ourselves might distinctly number in words a great deal farther than we usually do, would we find out but some fit denominations to signify them by; whereas, in the way we take now to name them by millions of millions of millions, &c. it is hard to go beyond eighteen, or at most four and twenty decimal progressions, without confusion. But to show how much *distinct names conduce to our well reckoning*, or having useful *ideas* of numbers, let us set all these following figures in one continued line, as the marks of one number; v. g.

Nonillions.	Octillions.	Septillions.	Sextillions.	Quintillions.
857324.	162486.	345896.	437916.	423147.
Quartillions.	Trillions.	Billions.	Millions.	Units.
248106.	235421.	261734.	368149.	623137.

The ordinary way of naming this number in English, will be the often repeating of millions, of millions, of millions, of millions, of millions, of millions (which is the denomination of the second six figures.) In which way, it will be very hard to have any distinguishing notions of this number: But whether, by giving every six figures a new and orderly denomination, these and perhaps a great many more figures in progression, might not easily be counted distinctly, and *ideas* of them both got more easily to our

* Histoire d'un voyage fait en la terre du Brasil, par Jean de Lery, c. 20. 207-282.

ſelves, and more plainly ſignified to others, I leave it to be conſidered. This I mention only to ſhow how neceſſary diſtinct names are to numbering, without pretending to introduce new ones of my invention.

§ 7. *Why Children number not earlier.*

THUS children, either for want of names to mark the ſeveral progreſſions of numbers, or not having yet the faculty to collect ſcattered *ideas* into complex ones, and range them in a regular order, and ſo retain them in their memories, as is neceſſary to reckoning, do not begin to number very early, nor proceed in it very far or ſteadily, till a good while after they are well furniſhed with good ſtore of other *ideas*: and one may often obſerve them diſcourſe and reaſon pretty well, and have very clear conceptions of ſeveral other things, before they can tell 20. And ſome, through the default of their memories, who cannot retain the ſeveral combinations of numbers, with their names annexed in their diſtinct orders, and the dependence of ſo long a train of numeral progreſſions, and their relation one to another, are not able all their lifetime to reckon or regularly go over any moderate ſeries of numbers. For he that will count twenty, or have any *idea* of that number, muſt know that nineteen went before, with the diſtinct name or ſign of every one of them, as they ſtand marked in their order; for wherever this fails, a gap is made, the chain breaks, and the progreſs in numbering can go no farther. So that *to reckon right, it is required*, 1. That the mind diſtinguiſh carefully two *ideas*, which are different one from another only by the addition or ſubtraction of one unit. 2. That it retain in memory the names or marks of the ſeveral combinations, from an unit to that number; and that not confuſedly, and at random, but in that exact order, that the numbers follow one another: in either of which, if it trips, the whole buſineſs of numbering will be diſturbed, and there will remain only the confuſed *idea* of multitude, but the *ideas* neceſſary to diſtinct numeration will not be attained to.

§ 8. *Number Measures all Measureable.*

THIS farther is observable in *number*, that it is that which the mind makes use of in *measuring all things* that by us are measurable, which principally are *expansion and duration*; and our *idea* of infinity, even when applied to those, seems to be nothing but the infinity of number. For what else are our *ideas* of eternity and immensity, but the repeated additions of certain *ideas* of imagined parts of duration and expansion, with the infinity of number, in which we can come to no end of addition? For such an inexhaustible stock, number of all other our *ideas*, most clearly furnishes us with, as is obvious to every one. For let a man collect into one sum as great a number as he pleases, this multitude, how great soever, lessens not one jot the power of adding to it, or brings him any nearer the end of the inexhaustible stock of number, where still there remains as much to be added, as if none were taken out. And this endless *addition* or *addibility* (if any one like the word better) of numbers, so apparent to the mind, is that, I think, which gives us the clearest and most distinct *idea* of infinity: of which more in the following chapter.

CHAP. XVII.

OF INFINITY.

§ 1. *Infinity, in its original Intention, attributed to Space, Duration and Number.*

HE that would know what kind of *idea* it is to which we give the name of *infinity*, cannot do it better than by considering to what infinity is by the mind more immediately attributed, and then how the mind comes to frame it.

Finite and *infinite* seem to me to be looked upon by the mind as the *modes of quantity*, and to be attributed primarily in their first designation only to those things which have parts, and are capable of increase or dimi-

nution, by the addition or subtraction of any the least part: And such are the *ideas* of space, duration, and number, which we have considered in the foregoing chapters. It is true, that we cannot but be assured, that the great God, of whom and from whom are all things, is incomprehensibly infinite: But yet, when we apply to that first and supreme Being our *idea* of infinite, in our weak and narrow thoughts, we do it primarily in respect of his duration and ubiquity; and, I think, more figuratively to his power, wisdom, and goodness, and other attributes, which are properly inexhaustible and incomprehensible, &c. For when we call them infinite, we have no other *idea* of this infinity, but what carries with it some reflection on, and intimation of, that number or extent of the acts or objects of God's power, wisdom, and goodness, which can never be supposed so great or so many, which these attributes will not always surmount and exceed, let us multiply them in our thoughts as far as we can, with all the infinity of endless number. I do not pretend to say how these attributes are in GOD, who is infinitely beyond the reach of our narrow capacities. They do, without doubt, contain in them all possible perfection; but this, I say, is our way of conceiving them, and these our *ideas* of their infinity.

§ 2. *The Idea of Finite easily got.*

FINITE, then, and infinite, being by the mind looked on as modifications of expansion and duration, the next thing to be considered is, *How the mind comes by them*. As for the *idea of finite*, there is no great difficulty. The obvious portions of extension that affect our senses, carry with them into the mind the *idea* of finite: And the ordinary periods of succession, whereby we measure time and duration, as hours, days, and years, are bounded lengths. The difficulty is, how we come by these boundless *ideas*, of *eternity* and *immensity*, since the objects which we converse with come so much short of any approach or proportion to that largeness.

§ 3. *How we come by the Idea of Infinity.*

EVERY one that has any *idea* of any stated lengths of

space, as a foot, finds that he can repeat that *idea*; and joining it to the former, make the *idea* of two feet; and by the addition of a third, three feet; and so on; without ever coming to an end of his additions, whether of the same *idea* of a foot, or if he pleases of doubling it, or any other *idea* he has of any length, as a mile, or diameter of the earth, or of the *orbis magnus*: For whichsoever of these he takes, and how often soever he doubles, or any otherwise multiplies it, he finds that after he has continued his doubling in his thoughts, and enlarged his *idea* as much as he pleases, he has no more reason to stop, nor is one jot nearer the end of such addition, than he was at first setting out. The power of enlarging his *idea* of space by farther additions remaining still the same, he hence takes the *idea* of *infinite space*.

§ 4. *Our Idea of Space boundless.*

THIS, I think, is the way whereby the mind gets the *idea* of *infinite space*. It is a quite different consideration, to examine, whether the mind has the *idea* of such a *boundless space actually existing*, since our *ideas* are not always proofs of the existence of things; but yet, since this comes here in our way, I suppose I may say, that we are apt to think that space in itself is actually boundless; to which imagination the *idea* of space or expansion of itself naturally leads us. For it being considered by us, either as the extension of body, or as existing by itself, without any solid matter taking it up (for of such a void space we have not only the *idea*, but I have proved, as I think, from the motion of body, its necessary existence), it is impossible the mind should be ever able to find or suppose any end of it, or be stopped any where in its progress in this space, how far soever it extends its thoughts. Any bounds made with body, even adamant walls, are so far from putting a stop to the mind in its farther progress in space and extension, that it rather facilitates and enlarges it; for so far as that body reaches, so far no one can doubt of extension: and when we are come to the utmost extremity of body, what is there that can there put a stop, and satisfy

the mind that it is at the end of space, when it perceives it is not; nay, when it is satisfied that body itself can move into it? For if it be necessary for the motion of body, that there should be an empty space, though ever so little, here amongst bodies; and if it be possible for body to move in or through that empty space; nay, it is impossible for any particle of matter to move, but into an empty space: the same possibility of a body's moving into a void space, beyond the utmost bounds of body, as well as into a void space interspersed amongst bodies, will always remain clear and evident: the *idea* of empty pure space, whether within or beyond the confines of all bodies, being exactly the same, differing not in nature, though in bulk; and there being nothing to hinder body from moving into it. So that wherever the mind places itself by any thought, either amongst or remote from all bodies, it can in this uniform *idea* of space no where find any bounds, any end; and so must necessarily conclude it, by the very nature and *idea* of each part of it, to be actually infinite.

§ 5. *And so of Duration.*

As by the power we find in ourselves of repeating, as often as we will, any *idea* of space, we get the *idea* of immensity; so by being able to repeat the *idea* of any length of duration we have in our minds, with all the endless addition of number, we come by the *idea* of *eternity*. For we find in ourselves, we can no more come to an end of such repeated *ideas*, than we can come to the end of number, which every one perceives he cannot. But here again it is another question, quite different from our having an *idea* of eternity, to know whether there were *any real being*, whose duration has been *eternal*. And as to this, I say, he that considers something now existing, must necessarily come to something eternal. But having spoke of this in another place, I shall say here no more of it, but proceed on to some other considerations of our *idea* of infinity.

§ 6. *Why other Ideas are not capable of Infinity.*

If it be so, that our *idea* of infinity be got from the power we observe in ourselves, of repeating without end

our own *ideas*, it may be demanded, *why we do not attribute infinity to other ideas, as well as those of space and duration*; since they may be as easily, and as often repeated in our minds, as the other; and yet nobody ever thinks of infinite sweetness, or infinite whiteness, though he can repeat the *idea* of sweet or white, as frequently as those of a yard, or a day? To which I answer: All the *ideas* that are considered as having parts, and are capable of increase by the addition of any equal or less parts, afford us, by their repetition, the *idea* of infinity; because, with this endless repetition, there is continued an enlargement, of which there can be no end. But in other *ideas* it is not so; for to the largest *idea* of extension or duration that I at present have, the addition of any the least part makes an increase; but to the perfectest *idea* I have of the whitest whiteness, if I add another of a less or equal whiteness (and of a whiter than I have, I cannot add the *idea*), it makes no increase, and enlarges not my *idea* at all; and therefore the different *ideas* of whiteness, &c. are called degrees. For those *ideas* that consist of parts, are capable of being augmented by every addition of the least part; but if you take the *idea* of white, which one parcel of snow yielded yesterday to your sight, and another *idea* of white from another parcel of snow you see to-day, and put them together in your mind, they embody, as it were, and run into one, and the *idea* of whiteness is not at all increased; and if we add a less degree of whiteness to a greater, we are so far from increasing, that we diminish it. Those *ideas* that consist not of parts, cannot be augmented to what proportion men please, or be stretched beyond what they have received by their senses; but space, duration, and number, being capable of increase by repetition, leave in the mind an *idea* of an endless room for more: Nor can we conceive any where a stop to a farther addition or progression, and so those *ideas* alone lead our minds towards the thought of infinity.

§ 7. *Difference between Infinity of Space, and Space infinite.*

THOUGH our *idea* of infinity arise from the contemplation of quantity, and the endless increase the mind is able to make in quantity, by the repeated additions of what portions thereof it pleases; yet I guess we cause great confusion in our thoughts, when we join infinity to any supposed *idea* of quantity the mind can be thought to have, and so discourse or reason about an infinite quantity, viz. an infinite space, or an infinite duration. For, our *idea of infinity* being, as I think, an *endless growing idea*, but the *idea* of any quantity the mind has, being at that time terminated in that *idea* (for be it as great as it will, it can be no greater than it is), to join infinity to it, is to adjust a standing measure to a growing bulk; and therefore I think it is not an insignificant subtilty, if I say that we are carefully to distinguish between the *idea* of the infinity of space, and the *idea* of a space infinite: The first is nothing but a supposed endless progression of the mind, over what repeated *ideas* of space it pleases; but to have actually in the mind the *idea* of a space infinite, is to suppose the mind already passed over, and actually to have a view of all those repeated *ideas* of space, which an endless repetition can never totally represent to it; which carries in it a plain contradiction.

§ 8. *We have no Idea of infinite Space.*

THIS perhaps will be a little plainer, if we consider it in numbers. The infinity of numbers, to the end of whose addition every one perceives there is no approach, easily appears to any one that reflects on it; but how clear soever this *idea* of the infinity of number be, there is nothing yet more evident, than the absurdity of the actual *idea* of an infinite number. * Whatsoever positive *ideas* we have in our minds of any space, duration, or number, let them be ever so great, they are still finite; but when we suppose an inexhaustible remainder, from which we remove all bounds, and wherein we allow the mind an endless progression of thought, without ever completing the *idea*, there we have our *idea* of infinity.

ty, which, though it seems to be pretty clear when we consider nothing else in it but the negation of an end, yet when we would frame in our minds the *idea* of an infinite space or duration, that *idea* is very obscure and confused, because it is made up of two parts, very different, if not inconsistent. For let a man frame in his mind an *idea* of any space or number, as great as he will, it is plain the mind rests and terminates in that *idea*, which is contrary to the *idea of infinity*, which consists in a *supposed endless progression*. And therefore I think it is, that we are so easily confounded, when we come to argue or reason about infinite space or duration, &c.; because the parts of such an *idea* not being perceived to be, as they are, inconsistent, the one side or other always perplexes whatever consequences we draw from the other; as an *idea* of motion not passing on, would perplex any one who should argue from such an *idea*, which is not better than an *idea* of motion at rest: and such another seems to me to be the *idea* of a space, or (which is the same thing) a number infinite, *i. e.* of a space or number which the mind actually has, and so views and terminates in; and of a space or number, which in a constant and endless enlarging and progression, it can in thought never attain to. For how large soever an *idea* of space I have in my mind, it is no larger than it is that instant that I have it, though I be capable the next instant to double it, and so on *in infinitum*: For that alone is infinite, which has no bounds; and that the *idea* of infinity, in which our thoughts can find none.

§ 9. *Number affords us the clearest Idea of Infinity.*

BUT of all other *ideas*, it is *number*, as I have said, which I think furnishes us with the clearest and most distinct *idea of infinity* we are capable of. For even in space and duration, when the mind pursues the *idea* of infinity, it there makes use of the *ideas* and repetitions of numbers, as of millions of millions of miles, or years, which are so many distinct *ideas*, kept best by number from running into a confused heap, wherein the mind loses itself; and when it has added together as

many millions, &c. as it pleases, of known lengths of space or duration, the clearest *idea* it can get of infinity, is the confused incomprehensible remainder of endless addable numbers, which affords no prospect of stop or boundary.

§ 10. *Our different Conception of Infinity, Number, Duration, and Expansion.*

It will perhaps give us a little farther light into the *idea* we have of *infinity*, and discover to us that it is *nothing but the infinity of number applied to determinate parts*, of which we have in our minds the distinct *ideas*, if we consider, that number is not generally thought by us infinite; whereas duration and extension are apt to be so; which arises from hence, that in number we are at one end, as it were: For there being in number nothing less than an unit, we there stop, and are at an end; but in addition or increase of number, we can set no bounds: And so it is like a line, whereof one end terminating with us, the other is extended still forwards beyond all that we can conceive; but in space and duration it is otherwise. For in duration we consider it, as if this line of number were extended both ways to an inconceivable, undeterminate, and infinite length; which is evident to any one that will but reflect on what consideration he hath of eternity; which, I suppose, he will find to be nothing else but the turning this infinity of number both ways, *à parte ante*, and *à parte post*, as they speak. For when we would consider eternity, *à parte ante*, what do we but, beginning from ourselves and the present time we are in, repeat in our minds the *ideas* of years, or ages, or any other assignable portion of duration past, with a prospect of proceeding in such addition, with all the infinity of number? And when we would consider eternity, *à parte post*, we just, after the same rate, begin from ourselves, and reckon by multiplied periods yet to come, still extending that line of number, as before. And these two being put together, are that infinite duration we call *eternity*; which, as we turn our view either way, forwards or backwards, appears infinite, because we still turn that way

the infinite end of number, *i. e.* the power still of adding more.

§ 11.

THE same happens also in space, wherein, conceiving ourselves to be as it were in the centre, we do on all sides pursue those indeterminable lines of number; and reckoning any way from ourselves, a yard, mile, diameter of the earth, or *orbis magnus*, by the infinity of number, we add others to them as often as we will; and having no more reason to set bounds to those repeated *ideas*, than we have to set bounds to number, we have that indeterminable *idea of immensity*.

§ 12. *Infinite Divisibility.*

AND since in any bulk of matter our thoughts can never arrive at the utmost *divisibility*, therefore there is an apparent infinity to us also in that which has the infinity also of number; but with this difference, that in the former considerations of the infinity of space and duration, we only use addition of numbers; whereas this is like the division of an unit into its fractions, wherein the mind also can proceed *in infinitum*, as well as in the former additions, it being indeed but the addition still of new numbers: Though, in the addition of the one, we can have no more the positive *idea* of a space infinitely great, than in the division of the other, we can have the *idea* of a body infinitely little; our *idea* of infinity being, as I may so say, a growing and fugitive *idea*, still in a boundless progression, that can stop no where.

§ 13. *No positive Idea of Infinite.*

THOUGH it be hard, I think, to find any one so absurd as to say, he has the positive *idea* of an actual infinite number; the infinity whereof lies only in a power still of adding any combination of units to any former number, and that as long and as much as one will; the like also being in the infinity of space and duration, which power leaves always to the mind room for endless additions; yet there be those who imagine they have *positive ideas of infinite* duration and space. It would, I think, be enough to destroy any such positive *idea* of in-

finite, to ask him that has it, whether he could add to it or no; which could easily show the mistake of such a positive *idea*. We can, I think, have no positive *idea* of any space or duration which is not made up of, and commensurate to, repeated numbers of feet or yards, or days and years, which are the common measures whereof we have the *ideas* in our minds, and whereby we judge of the greatness of these sort of quantities. And therefore, since an *idea* of infinite space or duration must needs be made up of infinite parts, it can have no other infinity than that of number, capable still of farther addition, but not an actual positive *idea* of a number infinite. For I think it is evident, that the addition of finite things together (as are all lengths whereof we have the positive *ideas*) can never otherwise produce the *idea* of infinite, than as number does; which, consisting of additions of finite units one to another, suggests the *idea* of infinite, only by a power we find we have of still increasing the sum, and adding more of the same kind, without coming one jot nearer the end of such progression.

§ 14.

THEY who would prove their *idea of infinite to be positive*, seem to me to do it by a pleasant argument, taken from the negation of an end; which being negative, the negation of it is positive. He that considers, that the end is, in body, but the extremity or superficies of that body, will not perhaps be forward to grant, that the end is a bare negative. And he that perceives the end of his pen is black or white, will be apt to think, that the end is something more than a pure negation. Nor is it, when applied to duration, the bare negation of existence, but more properly the last moment of it. But if they will have the end to be nothing but the bare negation of existence, I am sure they cannot deny but that the beginning is the first instant of being, and is not by any body conceived to be a bare negation; and therefore, by their own argument, the *idea* of eternal, *à parte ante*, or of a duration without a beginning, is but a negative *idea*.

§ 15. *What is positive, what negative, in our Idea of Infinite.*

THE *idea* of infinite has, I confess, something of positive in all those things we apply to it. When we would think of infinite space or duration, we at first step usually make some very large *idea*, as perhaps of millions of ages, or miles, which possibly we double and multiply several times. All that we thus amass together in our thoughts is positive, and the assemblage of a great number of positive *ideas* of space or duration. But what still remains beyond this, we have no more a positive distinct notion of than a mariner has of the depth of the sea; where having let down a large portion of his sounding-line, he reaches no bottom: Whereby he knows the depth to be so many fathoms, and more; but how much that more is, he hath no distinct notion at all: And could he always supply new line, and find the plummet always sink, without ever stopping, he would be something in the posture of the mind reaching after a complete and positive *idea* of infinity. In which case, let this line be 10 or 10,000 fathoms long, it equally discovers what is beyond it; and gives only this confused and comparative *idea*, that this is not all, but one may yet go farther. So much as the mind comprehends of any space, it has a positive *idea* of: But in endeavouring to make it infinite, it being always enlarging, always advancing, the *idea* is still imperfect and incomplete. So much space as the mind takes a view of in its contemplation of greatness, is a clear picture and positive in the understanding: but infinite is still greater. 1. Then, *the idea of so much, is positive and clear.* 2. *The idea of greater is also clear, but it is but a comparative idea.* 3. *The idea of so much greater as cannot be comprehended; and this is plain negative, not positive.* For he has no positive clear *idea* of the largeness of any extension (which is that sought for in the *idea* of infinite), that has not a comprehensive *idea* of the dimensions of it: And such nobody, I think, pretends to in what is infinite. For to say a man has a positive clear *idea* of any quantity, without knowing

how great it is, is as reasonable as to say, he has the positive clear *idea* of the number of the sands on the sea-shore, who knows not how many they be; but only that they are more than twenty. For just such a perfect and positive *idea* has he of an infinite space or duration, who says it is larger than the extent or duration of 10, 100, 1000, or any other number of miles or years, whereof he has, or can have a positive *idea*; which is all the *idea*, I think, we have of infinite. So that what lies beyond our positive *idea* towards infinity, lies in obscurity; and has the indeterminate confusion of a negative *idea*, wherein I know I neither do nor can comprehend all I would, it being too large for a finite and narrow capacity: And that cannot but be very far from a positive complete *idea*, wherein the greatest part of what I would comprehend is left out, under the undeterminate intimation of being still greater: For to say, that having in any quantity measured so much, or gone so far, you are not yet at the end, is only to say, that that quantity is greater. So that the negation of an end in any quantity, is, in other words, only to say, that it is bigger: and a total negation of an end is but the carrying this bigger still with you, in all the progressions your thoughts shall make in quantity; and adding this *idea* of still greater to all the *ideas* you have, or can be supposed to have, of quantity. Now whether such an *idea* as that be positive, I leave any one to consider.

§ 16. *We have no positive Idea of an infinite Duration.*
I ASK those who say they have a positive *idea* of eternity, whether their *idea* of duration includes in it succession or not? If it does not, they ought to show the difference of their notion of duration, when applied to an eternal being, and to a finite: since perhaps there may be others, as well as I, who will own to them their weakness of understanding in this point; and acknowledge, that the notion they have of duration forces them to conceive, that whatever has duration, is of a longer continuance to-day than it was yesterday. If to avoid succession in eternal existence, they recur to the punc-

tum flans of the schools, I suppose they will thereby very little mend the matter, or help us to a more clear and positive *idea* of infinite duration, there being nothing more inconceivable to me than duration without succession. Besides the *punctum flans*, if it signify any thing, being not *quantum*, finite or infinite, cannot belong to it. But if our weak apprehensions cannot separate succession from any duration whatsoever, our *idea* of eternity can be nothing but of infinite succession of moments of duration, wherein any thing does exist; and whether any one has, or can have a positive *idea* of an actual infinite number, I leave him to consider, till his infinite number be so great that he himself can add no more to it; and as long as he can increase it, I doubt he himself will think the *idea* he hath of it a little too scanty for positive infinity.

§ 17.

I THINK it unavoidable for every considering rational creature, that will but examine his own or any other existence, to have the notion of an eternal wise Being, who had no beginning: And such an *idea* of infinite duration I am sure I have. But this *negation of a beginning* being but the negation of a positive thing, *scarce gives me a positive idea of infinity*; which whenever I endeavour to extend my thoughts to, I confess myself at a loss, and find I cannot attain any clear comprehension of it.

§ 18. *No positive Idea of infinite Space.*

HE that thinks he has a positive *idea* of infinite space, will, when he considers it, find that he can *no* more have a *positive idea* of the greatest, than he has of *the least space*. For in this latter, which seems the easier of the two, and more within our comprehension, we are capable only of a comparative *idea* of smallness, which will always be less than any one whereof we have the positive *idea*. All our positive *ideas* of any quantity, whether great or little, have always bounds; though our comparative *idea*, whereby we can always add to the one and take from the other, hath no bounds: For that which remains either great or little, not being

comprehended in that positive *idea* which we have, lies in obscurity; and we have no other *idea* of it, but of the power of enlarging the one, and diminishing the other, without ceasing. A pestle and mortar will as soon bring any particle of matter to indivisibility, as the acutest thought of a mathematician: And a surveyor may as soon with his chain measure out infinite space, as a philosopher by the quickest slight of mind reach it, or by thinking comprehend it; which is to have a positive *idea* of it. He that thinks on a cube of an inch diameter, has a clear and positive *idea* of it in his mind, and so can frame one of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, and so on till he has the *idea* in his thoughts of something very little; but yet reaches not the *idea* of that incomprehensible littleness which division can produce. What remains of smallness, is as far from his thoughts as when he first began; and therefore he never comes at all to have a clear and positive *idea* of that smallness, which is consequent to infinite divisibility.

§ 19. *What is positive, what negative, in our Idea of Infinite.*

EVERY one that looks towards infinity, does, as I have said, at first glance, make some very large *idea* of that which he applies it to, let it be space or duration; and possibly he wearies his thoughts, by multiplying in his mind that first large *idea*: But yet by that he comes no nearer to the having a positive clear *idea* of what remains to make up a positive infinite, than the country-fellow had of the water, which was yet to come and pass the channel of the river where he stood:

*Rusticus expectat dum transeat amnis, at ille
Labitur, et labetur in omne volubilis ævum.*

§ 20. *Some think they have a positive Idea of Eternity, and not of infinite Space.*

THERE are some I have met with, that put so much difference between infinite duration and infinite space, that they persuade themselves that they have a positive *idea of eternity*; but that they *have not*, nor can have any *idea of infinite space*. The reason of which mistake

I suppose to be this: That finding by a due contemplation of causes and effects, that it is necessary to admit some eternal being, and so to consider the real existence of that being, as taking up and commensurate to their *idea* of eternity: but on the other side, not finding it necessary, but on the contrary, apparently absurd that body should be infinite; they forwardly conclude, they can have no *idea* of infinite space, because they can have no *idea* of infinite matter. Which consequence, I conceive, is very ill collected; because the existence of matter is nowise necessary to the existence of space, no more than the existence of motion, or the sun, is necessary to duration, though duration uses to be measured by it: And I doubt not but a man may have the *idea* of 10,000 miles square, without any body so big, as well as the *idea* of 10,000 years, without any body so old. It seems as easy to me to have the *idea* of space empty of body, as to think of the capacity of a bushel without corn, or the hollow of a nutshell without a kernel in it: It being more necessary that there should be existing a solid body infinitely extended, because we have an *idea* of the infinity of space, than it is necessary that the world should be eternal, because we have an *idea* of infinite duration. And why should we think our *idea* of infinite space requires the real existence of matter to support it, when we find that we have as clear an *idea* of infinite duration to come, as we have of infinite duration past? Though, I suppose, nobody thinks it conceivable, that any thing does, or has existed in that future duration. Nor is it possible to join our *idea* of future duration with present or past existence, any more than it is possible to make the *ideas* of yesterday, to-day, and to-morrow, to be the same; or bring ages past and future together, and make them contemporary. But if these men are of the mind, that they have clearer *ideas* of infinite duration than of infinite space; because it is past doubt, that GOD has existed from all eternity, but there is no real matter co-extended with infinite space: yet those philosophers who are of opinion that infinite space is possessed by GOD's infinite omnipresence, as well as infinite dura-

tion by his eternal existence, must be allowed to have as clear an *idea* of infinite space as of infinite duration; though neither of them, I think, has any *positive idea of infinity* in either case. For whatsoever *positive ideas* a man has in his mind of any quantity, he can repeat it, and add it to the former as easy as he can add together the *ideas* of two days, or two paces; which are *positive ideas* of lengths he has in his mind, and so on as long as he pleases: Whereby if a man had a *positive idea* of infinite, either duration or space, he could add two infinities together; nay, make one infinite infinitely bigger than another: Absurdities too gross to be confuted.

§ 21. *Supposed positive Ideas of Infinity, Cause of Mistakes.*

BUT yet, after all this, there being men who persuade themselves that they have clear positive comprehensive *ideas* of infinity, it is fit they enjoy their privilege: And I should be very glad (with some others that I know, who acknowledge they have none such) to be better informed by their communication. For I have been hitherto apt to think, that the great and *inextricable difficulties* which perpetually involve all discourses concerning infinity, whether of space, duration, or divisibility, have been the certain *marks of a defect in our ideas of infinity*, and the disproportion the nature thereof has to the comprehension of our narrow capacities. For whilst men talk and dispute of infinite space or duration, as if they had as complete and *positive ideas* of them, as they have of the names they use for them, or as they have of a yard or an hour, or any other determinate quantity; it is no wonder if the incomprehensible nature of the thing they discourse of, or reason about, leads them into perplexities and contradictions; and their minds be overlaid by an object too large and mighty to be surveyed and managed by them.

§ 22. *All these Ideas from Sensation and Reflection.*

IF I have dwelt pretty long on the considerations of duration, space, and number, and what arises from the contemplation of them, infinity; it is possibly no more

than the matter requires, there being few simple *ideas* whose modes give more exercise to the thoughts of men than these do. I pretend not to treat of them in their full latitude; it suffices to my design, to show how the mind receives them, such as they are, from *sensation* and *reflection*; and how even the *idea* we have of *infinity*, how remote soever it may seem to be from any object of sense, or operation of our mind, has nevertheless, as all our other *ideas*, its original there. Some mathematicians, perhaps of advanced speculations, may have other ways to introduce into their minds *ideas* of infinity, but this hinders not, but that they themselves, as well as all other men, got the first *ideas* which they had of infinity, from sensation and reflection, in the method we have here set down.

CHAP. XVIII.

OF OTHER SIMPLE MODES.

§ 1. *Modes of Motion.*

THOUGH I have in the foregoing chapters shown, how from simple *ideas* taken in by sensation, the mind comes to extend itself even to infinity; which however it may, of all others, seem most remote from any sensible perception; yet at last hath nothing in it but what is made out of simple *ideas*, received into the mind by the senses, and afterwards there put together by the faculty the mind has to repeat its own *ideas*: Though I say, these might be instances enough of simple modes of the simple *ideas* of sensation, and suffice to show how the mind comes by them; yet I shall, for method's sake, though briefly, give an account of some few more, and then proceed to more complex *ideas*.

§ 2.

To *slide*, *roll*, *tumble*, *walk*, *creep*, *run*, *dance*, *leap*, *skip*, and abundance of others that might be named, are words which are no sooner heard, but every one who

understands English, has presently in his mind distinct *ideas*, which are all but the different modifications of motion. *Modes of motion* answer those of extension: *Swift and slow* are two different *ideas* of motion, the measures whereof are made of the distances of time and space put together; so they are complex *ideas* comprehending time and space with motion.

§ 3. *Modes of Sounds.*

THE like variety have we in sounds. Every articulate word is a different *modification of sound*: By which we see, that from the sense of hearing by such modifications, the mind may be furnished with distinct *ideas* to almost an infinite number. Sounds also, besides the distinct cries of birds and beasts, are modified by diversity of notes of different length put together, which make that complex *idea* called a *tune*, which a musician may have in his mind when he hears or makes no sound at all, by reflecting on the *ideas* of those sounds so put together silently in his own fancy.

§ 4. *Modes of Colours.*

THOSE of colours are also very various: Some we take notice of as the different degrees, or, as they are termed, *shades of the same colour*. But since we very seldom make assemblages of colours either for use or delight, but figure is taken in also, and has its part in it; as in painting, weaving, needle-work, &c. those who are taken notice of, do most commonly belong to mixed modes, as being made up of *ideas* of divers kinds, viz. figure and colour; such as *beauty*, *rainbow*, &c.

§ 5. *Modes of Taste.*

ALL compounded *tastes and smells* are also modes made up of the simple *ideas* of those senses. But they being such as generally we have no names for, are less taken notice of, and cannot be set down in writing; and therefore must be left without enumeration to the thoughts and experience of my reader.

§ 6.

IN general it may be observed, that those *simple modes* which are considered but as different degrees of the same *simple idea*, though they are in themselves many of them very distinct *ideas*, yet have ordinarily no distinct names, nor are much taken notice of as distinct *ideas*, where the difference is but very small between them. Whether men have neglected these modes, and given no names to them, as wanting measures nicely to distinguish them; or because when they were so distinguished, that knowledge would not be of general or necessary use, I leave it to the thoughts of others: is sufficient to my purpose to show, that all our *simple ideas* come to our minds only by sensation and reflection; and that when the mind has them, it can variously repeat and compound them, and so make new complex *ideas*. But though white, red, or sweet, &c. have not been modified or made into complex *ideas*, by several combinations, so as to be named, and thereby ranked into species; yet some others of the *simple ideas*, viz. those of unity, duration, motion, &c. above instanced in, as also power and thinking, have been thus modified to a great variety of complex *ideas*, with names belonging to them.

§ 7. *Why some Modes have, and others have not Names.* THE reason whereof, I suppose, has been this: That the great concernment of men being with men one amongst another, the knowledge of men and their actions, and the signifying of them to one another, was most necessary; and therefore they made *ideas* of actions very nicely modified, and gave those complex *ideas* names, that they might the more easily record, and discourse of those things they were daily conversant in, without long ambages and circumlocutions; and that the things they were continually to give and receive information about, might be the easier and quicker understood. That this is so, and that men in framing different complex *ideas*, and giving them names, have been much governed by the end of speech in general (which is a very short and expedite way of conveying their thoughts

one to another) is evident in the names, which in several arts have been found out, and applied to several complex *ideas* of modified actions belonging to their several trades, for despatch sake, in their direction or discourses about them. Which *ideas* are not generally framed in the minds of men, nor conversant about these operations. And thence the words that stand for them, by the greatest part of men of the same language, are not understood: *v. g. colsbire, drilling, filtration, cobobation*, are words standing for certain complex *ideas*, which being seldom in the minds of any but those few whose particular employments do at every turn suggest them to their thoughts, those names of them are not generally understood but by smiths and chemists; who having framed the complex *ideas* which these words stand for, and having given names to them, or received them from others upon hearing of these names in communication, readily conceive those *ideas* in their minds; as by *cobobation* all the simple *ideas* of distilling, and the pouring the liquor distilled from any thing, back upon the remaining matter, and distilling it again. Thus we see that there are great varieties of simple *ideas*, as of tastes and smells, which have no names; and of modes many more. Which either not having been generally enough observed, or else not being of any great use to be taken notice of in the affairs and converse of men, they have not had names given to them, and so pass not for species. This we shall have occasion hereafter to consider more at large, when we come to speak of words.

CHAP. XIX.

OF THE MODES OF THINKING.

§ 1. *Sensation, Remembrance, Contemplation, &c.*

WHEN the mind turns its view inwards upon itself, and contemplates its own actions, *thinking* is the first that occurs. In it the mind observes a

great variety of modifications, and from thence receives distinct *ideas*. Thus the perception which actually accompanies, and is annexed to, any impression on the body, made by an external object, being distinct from all other modifications of *thinking*, furnishes the mind with a distinct *idea*, which we call *sensation*; which is, as it were, the actual entrance of any *idea* into the understanding by the senses. The same *idea*, when it again recurs without the operation of the like object on the external sensory, is *remembrance*: If it be sought after by the mind, and with pain and endeavour found, and brought again in view, it is *recollection*; if it be held there long under attentive consideration, it is *contemplation*. When *ideas* float in our mind, without any reflection or regard of the understanding, it is that which the French call *reverie*; our language has scarce a name for it. When the *ideas* that offer themselves (for, as I have observed in another place, whilst we are awake, there will always be a train of *ideas* succeeding one another in our minds) are taken notice of, and, as it were, registered in the memory, it is *attention*. When the mind with great earnestness, and of choice, fixes its view on any *idea*, considers it on all sides, and will not be called off by the ordinary solicitation of other *ideas*, it is that we call *intention* or *study*: Sleep, without dreaming, is rest from all these: And *dreaming* itself, is the having of *ideas* (whilst the outward senses are stopped, so that they receive not outward objects with their usual quickness) in the mind, not suggested by any external objects, or known occasion, nor under any choice or conduct of the understanding at all. And whether that, which we call *ecstasy*, be not dreaming with the eyes open, I leave to be examined.

§ 2.

THESE are some few instances of those various *modes of thinking*, which the mind may observe in itself, and so have as distinct *ideas* of, as it hath of *white*, and *red*, a *square* or a *circle*. I do not pretend to enumerate them all, nor to treat at large of this set of *ideas*, which are got from *reflection*: That would be to make a vo-

lume. It suffices to my present purpose, to have shown here, by some few examples, of what sort these *ideas* are, and how the mind comes by them; especially since I shall have occasion hereafter to treat more at large of *reasoning, judging, volition, and knowledge*, which are some of the most considerable operations of the mind, and *modes of thinking*.

§ 3. *The various Attention of the Mind in Thinking.*

BUT perhaps it may not be an unpardonable digression, nor wholly impertinent to our present design, if we reflect here upon *the different state of the mind in thinking*, which those instances of attention, *reverie* and *dreaming*, &c. before mentioned, naturally enough suggest. That there are *ideas*, some or other, always present in the mind of a waking man, every one's experience convinces him, though the mind employs itself about them with several degrees of attention. Sometimes the mind fixes itself with so much earnestness on the contemplation of some objects, that it turns their *ideas* on all sides, remarks their relations and circumstances, and views every part so nicely, and with such intention, that it shuts out all other thoughts, and takes no notice of the ordinary impressions made then on the senses, which at another season would produce very sensible perceptions: At other times it barely observes the train of *ideas* that succeed in the understanding, without directing and pursuing any of them; and at other times it lets them pass almost quite unregarded, as faint shadows that make no impression.

§ 4. *Hence it is probable that thinking is the Action, not Essence of the Soul.*

THIS difference of *intention*, and *remission* of the mind in thinking, with a great variety of degrees between earnest study, and very near minding nothing at all; every one, I think, has experimented in himself. Trace it a little farther, and you find the mind in sleep retired as it were from the senses, and out of the reach of those motions made on the organs of sense, which at other times produce very vivid and sensible *ideas*. I need not for this instance in those who sleep out whole

stormy nights, without hearing the thunder, or seeing the lightning, or feeling the shaking of the house, which are sensible enough to those who are waking: But in this retirement of the mind from the senses, it often retains a yet more loose and incoherent manner of *thinking*, which we call *dreaming*; and last of all, sound sleep closes the scene quite, and puts an end to all appearances. This, I think, almost every one has experience of in himself, and his own observation without difficulty leads him thus far. That which I would farther conclude from hence, is, that since the mind can sensibly put on, at several times, several degrees of *thinking*, and be sometimes even in a waking man so remiss, as to have thoughts dim and obscure to that degree, that they are very little removed from none at all; and at last, in the dark retirements of sound sleep, loses the sight perfectly of all *ideas* whatsoever: Since, I say, this is evidently so in matter of fact, and constant experience, I ask whether it be not probable that *thinking is the action, and not the essence of the soul*? Since the operations of agents will easily admit of intention and remission; but the essences of things are not conceived capable of any such variation. But this by the by.

CHAP. XX.

OF MODES OF PLEASURE AND PAIN.

§ 1. *Pleasure and Pain simple Ideas.*

AMONGST the simple *ideas*, which we receive both from *sensation* and *reflection*, *pain* and *pleasure* are two very considerable ones. For, as in the body there is sensation barely in itself, or accompanied with *pain* or *pleasure*; so the thought or perception of the mind is simply so, or else accompanied also with *pleasure* or *pain*, delight or trouble, call it how you please. These, like other simple *ideas*, cannot be described, nor their names defined; the way of knowing them, is, as of the simple *ideas* of the senses, only by

experience. For to define them by the presence of good or evil, is no otherwise to make them known to us, than by making us reflect on what we feel in ourselves, upon the several and various operations of good and evil upon our minds, as they are differently applied to or considered by us.

§ 2. *Good and Evil, what.*

THINGS then are good or evil, only in reference to pleasure or pain. That we call good, which is *apt to cause or increase pleasure, or diminish pain in us; or else to procure or preserve us the possession of any other good, or absence of any evil.* And on the contrary, we name that evil, which is *apt to produce or increase any pain, or diminish any pleasure in us; or else to procure us any evil, or deprive us of any good.* By pleasure and pain, I must be understood to mean of body or mind, as they are commonly distinguished; though in truth they be only different constitutions of the mind, sometimes occasioned by disorder in the body, sometimes by thoughts of the mind.

§ 3. *Our Passions moved by Good and Evil.*

PLEASURE and pain, and that which causes them, good and evil, are the hinges on which our *passions* turn: And if we reflect on ourselves, and observe how these, under various considerations, operate in us; what modifications or tempers of mind, what internal sensations (if I may so call them) they produce in us, we may thence form to ourselves the *ideas* of our *passions*.

§ 4. *Love.*

THUS any one reflecting upon the thought he has of the delight, which any present or absent thing is apt to produce in him, has the *idea* we call *love*. For when a man declares in autumn, when he is eating them, or in spring, when there are none, that he *loves* grapes, it is no more but that the taste of grapes delights him; let an alteration of health or constitution destroy the delight of their taste, and then he can be said to *love* grapes no longer.

§ 5. *Hatred.*

ON the contrary, the thought of the pain, which any thing present or absent is apt to produce in us, is what we call *hatred*. Were it my business here to inquire any farther than into the bare *ideas* of our passions, as they depend on different modifications of pleasure and pain, I should remark, that our *love* and *hatred* of inanimate insensible beings, is commonly founded on that pleasure and pain which we receive from their use and application any way to our senses, though with their destruction: But *hatred* or *love*, to beings capable of happiness or misery, is often the uneasiness or delight, which we find in ourselves arising from a consideration of their very being or happiness. Thus the being and welfare of a man's children or friends, producing constant delight in him, he is said constantly to *love* them. But it suffices to note, that our *ideas* of *love* and *hatred* are but the dispositions of the mind, in respect of pleasure and pain in general, however caused in us.

§ 6. *Desire.*

THE uneasiness a man finds in himself upon the absence of any thing, whose present enjoyment carries the *idea* of delight with it, is that we call *desire*; which is greater or less, as that uneasiness is more or less vehement. Where, by the by, it may perhaps be of some use to remark, that the chief, if not only spur to human industry and action, is uneasiness. For whatever good is proposed, if its absence carries no displeasure nor pain with it, if a man be easy and content without it, there is no desire of it, nor endeavour after it; there is no more but a bare *velleity*, the term used to signify the lowest degree of desire, and that which is next to none at all, when there is so little uneasiness in the absence of any thing, that it carries a man no farther than some faint wishes for it, without any more effectual or vigorous use of the means to attain it. *Desire* also is stopped or abated by the opinion of the impossibility or unattainableness of the good proposed, as far

as the uneasiness is cured or allayed by that consideration. This might carry our thoughts farther, were it seasonable in this place.

§ 7. *Joy.*

Joy is a delight of the mind, from the consideration of the present or assured approaching possession of a good; and we are then possessed of any good, when we have it so in our power, that we can use it when we please. Thus a man almost starved has *joy* at the arrival of relief, even before he has the pleasure of using it: And a father, in whom the very wellbeing of his children causes delight, is always, as long as his children are in such a state, in the possession of that good; for he needs but to reflect on it, to have that pleasure.

§ 8. *Sorrow.*

SORROW is uneasiness in the mind, upon the thought of a good lost which might have been enjoyed longer; or the sense of a present evil.

§ 9. *Hope.*

HOPE is that pleasure in the mind, which every one finds in himself, upon the thought of a profitable future enjoyment of a thing, which is apt to delight him.

§ 10. *Fear.*

FEAR is an uneasiness of the mind, upon the thought of future evil likely to befall us.

§ 11. *Despair.*

DESPAIR is the thought of the unattainableness of any good which works differently in men's minds, sometimes producing uneasiness or pain, sometimes rest and indolency.

§ 12. *Anger.*

ANGER is uneasiness or discomposure of the mind, upon the receipt of any injury, with a present purpose of revenge.

§ 13. *Envy.*

ENVY is an uneasiness of mind, caused by the consideration of a good we desire, obtained by one we think should not have had it before us.

§ 14. *What Passions all Men have.*

THESE two last, *envy* and *anger*, not being caused by pain and pleasure simply in themselves, but having in them some mixed considerations of ourselves and others, are not therefore to be found in all men, because those other parts of valuing their merits, or intending revenge, is wanting in them; but all the rest terminated purely in pain and pleasure, are, I think, to be found in all men. For we *love, desire, rejoice*, and *hope*, only in respect of pleasure; we *hate, fear*, and *grieve*, only in respect of pain ultimately: In fine, all these passions are moved by things, only as they appear to be the causes of pleasure and pain, or to have pleasure or pain some way or other annexed to them. Thus we extend our hatred usually to the subject (at least if a sensible or voluntary agent) which has produced pain in us, because the fear it leaves is a constant pain: But we do not so constantly love what has done us good; because pleasure operates not so strongly on us as pain, and because we are not so ready to have hope it will do so again. But this by the by.

§ 15. *Pleasure and Pain, what.*

By *pleasure and pain*, delight and uneasiness, I must all along be understood (as I have above intimated) to mean not only bodily pain and pleasure, but whatsoever *delight* or *uneasiness* is felt by us, whether arising from any grateful or unacceptable sensation or reflection.

§ 16.

It is farther to be considered, that in reference to the passions, the removal or *lessening of a pain* is considered, and operates as a *pleasure*; and the loss or diminishing of a pleasure, as a pain.

§ 17. *Shame.*

THE passions, too, have most of them in most persons operations on the body, and cause various changes in it, which, not being always sensible, do not make a necessary part of the *idea* of each passion. For *shame*, which is an uneasiness of the mind upon the thought of having done something which is indecent, or will

lessen the valued esteem which others have for us, has not always blushing accompanying it.

§ 18. *These Instances do show how our Ideas of the Passions are got from Sensation and Reflection.*

I WOULD not be mistaken here, as if I meant this as a discourse of the *passions*; they are *many more than those* I have here named: And those I have taken notice of, would each of them require a much larger and more accurate discourse. I have only mentioned these here as so many instances of modes of pleasure and pain resulting in our minds from various considerations of good and evil. I might perhaps have instanced in other modes of pleasure and pain more simple than these, as the pain of *hunger* and *thirst*, and the pleasure of eating and drinking to remove them; the pain of tender eyes, and the pleasure of music; pain from captious uninstruative wrangling, and the pleasure of rational conversation with a friend, or of well-directed study in the search and discovery of truth. But the passions being of much more concernment to us, I rather made choice to instance in them, and show how the *ideas* we have of them are derived from sensation and reflection.

CHAP. XXI.

OF POWER.

§ 1. *This Idea how got.*

THE mind being every day informed, by the senses, of the alteration of those simple *ideas* it observes in things without, and taking notice how one comes to an end, and ceases to be, and another begins to exist which was not before; reflecting also on what passes within itself, and observing a constant change of its *ideas*, sometimes by the impression of outward objects on the senses, and sometimes by the determination of its own choice; and concluding, from what it has so constantly observed to have been, that the like changes

will for the future be made in the same things by like agents, and by the like ways; considers in one thing the possibility of having any of its simple *ideas* changed, and in another the possibility of making that change; and so comes by that *idea* which we call *power*. Thus we say, fire has a *power* to melt gold, *i. e.* to destroy the consistency of its insensible parts, and consequently its hardness, and make it fluid; and gold has a *power* to be melted: That the sun has a *power* to blanch wax, and wax a *power* to be blanched by the sun, whereby the yellowness is destroyed, and whiteness made to exist in its room. In which, and the like cases, the *power* we consider is in reference to the change of perceivable *ideas*: For we cannot observe any alteration to be made in, or operation upon, any thing, but by the observable change of its sensible *ideas*: nor conceive any alteration to be made, but by conceiving a change of some of its *ideas*.

§ 2. *Power active and passive.*

POWER, thus considered, is twofold, *viz.* as able to make, or able to receive any change: The one may be called *active*, and the other *passive power*. Whether matter be not wholly destitute of *active power*, as its author GOD is truly above all *passive power*; and whether the intermediate state of created spirits be not that alone which is capable of both *active* and *passive power*, may be worth consideration. I shall not now enter into that inquiry; my present business being, not to search into the original of power, but how we come by the *idea* of it. But since *active powers* make so great a part of our complex *ideas* of natural substances (as we shall see hereafter), and I mention them as such according to common apprehension; yet they being not perhaps so truly *active powers*, as our hasty thoughts are apt to represent them, I judge it not amiss, by this intimation, to direct our minds to the consideration of GOD and spirits, for the clearest *idea* of *active powers*.

§ 3. *Power includes Relation.*

I CONFESS *power includes in it some kind of relation* (a re-

lation to action or change), as indeed which of our *ideas*, of what kind soever, when attentively considered, does not? For our *ideas* of extension, duration, and number, do they not all contain in them a secret relation of the parts? Figure and motion have something relative in them much more visibly: And sensible qualities, as colours and smells, &c. what are they but the *powers* of different bodies, in relation to our perception? &c. And if considered in the things themselves, do they not depend on the bulk, figure, texture, and motion of the parts? All which include some kind of relation in them. Our *idea*, therefore, of *power*, I think, may well have a place amongst other simple *ideas*, and be considered as one of them, being one of those that make a principal ingredient in our complex *ideas* of substances, as we shall hereafter have occasion to observe.

§ 4. *The clearest Idea of active Power had from Spirit.*
WE are abundantly furnished with the *idea* of *passive power* by almost all sorts of sensible things. In most of them we cannot avoid observing their sensible qualities; nay, their very substances to be in a continual flux: And therefore with reason we look on them as liable still to the same change. Nor have we of *active power* (which is the more proper signification of the word *power*) fewer instances; since whatever change is observed, the mind must collect a power somewhere able to make that change, as well as a possibility in the thing itself to receive it. But yet, if we will consider it attentively, bodies, by our senses, do not afford us so clear and distinct an *idea* of *active power*, as we have from reflection on the operations of our minds. For all *power* relating to action, and there being but two sorts of action, whereof we have any *idea*, viz. thinking and motion; let us consider whence we have the clearest *ideas* of the *powers* which produce these actions. 1. Of thinking, body affords us no *idea* at all, it is only from reflection that we have that. 2. Neither have we from body any *idea* of the beginning of motion. A body at rest affords us no *idea* of any *active power* to move; and when it is set

in motion itself, that motion is rather a passion, than an action in it. For when the ball obeys the stroke of a billiard-stick, it is not any action of the ball, but bare passion: Also when by impulse it sets another ball in motion that lay in its way, it only communicates the motion it had received from another, and loses in itself so much as the other received; which gives us but a very obscure *idea* of an *active power* of moving in body, whilst we observe it only to transfer, but not produce any motion. For it is but a very obscure *idea* of *power*, which reaches not the production of the action, but the continuation of the passion. For so is motion, in a body impelled by another: The continuation of the alteration made in it from rest to motion, being little more an action, than the continuation of the alteration of its figure by the same blow, is an action. The *idea* of the beginning of motion we have only from reflection on what passes in ourselves, where we find by experience, that barely by willing it, barely by a thought of the mind, we can move the parts of our bodies, which were before at rest. So that it seems to me, we have from the observation of the operation of bodies by our senses but a very imperfect obscure *idea* of *active power*, since they afford us not any *idea* in themselves of the *power* to begin any action, either motion or thought. But if, from the impulse bodies are observed to make one upon another, any one thinks he has a clear *idea* of *power*, it serves as well to my purpose, *sensation* being one of those ways whereby the mind comes by its *ideas*: only I thought it worth while to consider here by the way, whether the mind doth not receive its *idea* of *active power* clearer from reflection on its own operations, than it doth from any external sensation.

§ 5. *Will and Understanding two Powers.*

THIS at least I think evident, that we find in ourselves a *power* to begin or forbear, continue or end several actions of our minds, and motions of our bodies, barely by a thought or preference of the mind ordering, or, as it were, commanding the doing or not doing such or such a particular action. This power which the mind has

thus to order the consideration of any *idea*, or the forbearing to consider it; or to prefer the motion of any part of the body to its rest, and *vice versa* in any particular instance, is that which we call the *will*. The actual exercise of that power, by directing any particular action, or its forbearance, is that which we call *volition* or *willing*. The forbearance of that action, consequent to such order or command of the mind, is called *voluntary*; and whatsoever action is performed without such a thought of the mind is called *involuntary*. The power of perception is that which we call the *understanding*. Perception, which we make the act of the understanding, is of three sorts: 1. The perception of *ideas* in our mind. 2. The perception of the signification of signs. 3. The perception of the connection or repugnancy, agreement or disagreement, that there is between any of our *ideas*. All these are attributed to the *understanding*, or perceptive power, though it be the two latter only that use allows us to say we understand.

§ 6. *Faculties.*

THESE powers of the mind, *viz.* of *perceiving*, and of *preferring*, are usually called by another name: And the ordinary way of speaking is, that the *understanding* and *will* are two *faculties* of the mind; a word proper enough if it be used as all words should be, so as not to breed any confusion in men's thoughts, by being supposed (as I suspect it has been) to stand for some real beings in the soul that performed those actions of understanding and volition. For when we say the *will* is the commanding and superior faculty of the soul; that it is, or is not free; that it determines the inferior faculties; that it follows the dictates of the *understanding*, &c. though these, and the like expressions, by those that carefully attend to their own *ideas*, and conduct their thoughts more by the evidence of things, than the sound of words, may be understood in a clear and distinct sense: Yet I suspect, I say, that this way of speaking of *faculties*, has misled many into a confused notion of so many distinct agents in us, which

had their several provinces and authorities, and did command, obey, and perform several actions, as so many distant beings; which has been no small occasion of wrangling, obscurity and uncertainty, in questions relating to them.

§ 7. *Whence the Ideas of Liberty and Necessity.*

EVERY one, I think, finds in himself a *power* to begin or forbear, continue or put an end to several actions in himself. From the consideration of the extent of this power of the mind over the actions of the man which every one finds in himself, arise the *ideas* of *liberty* and *necessity*.

§ 8. *Liberty, what.*

ALL the actions that we have an *idea* of, reducing themselves, as has been said, to these two, viz. thinking and motion; so far as a man has a power to think, or not to think, to move, or not to move, according to the preference or direction of his own mind, so far is a man *free*. Wherever any performance or forbearance are not equally in a man's power; wherever doing or not doing will not equally follow upon the preference of his mind directing it, there he is not *free*, though perhaps the action may be voluntary. So that the *idea* of *liberty* is the *idea* of a power in any agent to do or forbear any particular action, according to the determination or thought of the mind, whereby either of them is preferred to the other; where either of them is not in the power of the agent to be produced by him according to his *volition*, there he is not at *liberty*, that agent is under *necessity*. So that *liberty* cannot be where there is no thought, no volition, no will; but there may be thought, there may be will, there may be volition where there is no *liberty*. A little consideration of an obvious instance or two, may make this clear.

§ 9. *Supposes the Understanding and Will.*

A TENNIS-BALL, whether in motion by the stroke of a racket, or lying still at rest, is not by any one taken to be a *free agent*. If we inquire into the reason, we shall find it is because we conceive not a tennis-ball to think, and consequently not to have any volition, or preference

of motion to rest, or *vice versa*; and therefore has not *liberty*, is not a free agent; but all its both motion and rest come under our *idea* of *necessary*, and are so called. Likewise a man falling into the water (a bridge breaking under him) has not herein liberty, is not a free agent. For though he has volition, though he prefers his not falling to falling; yet the forbearance of that motion not being in his power, the stop or cessation of that motion follows not upon his volition; and therefore therein he is not *free*. So a man striking himself, or his friend, by a convulsive motion of his arm, which it is not in his power, by volition, or the direction of his mind, to stop, or forbear, nobody thinks he has in this *liberty*; every one pities him, as acting by necessity and constraint.

§ 10. *Belongs not to Volition.*

AGAIN, suppose a man be carried, whilst fast asleep, into a room, where is a person he longs to see and speak with; and be there locked fast in, beyond his power to get out; he awakes, and is glad to find himself in so desirable company, which he stays willingly in, *i. e.* prefers his stay to going away: I ask, Is not this stay voluntary? I think nobody will doubt it; and yet being locked fast in, it is evident he is not at liberty not to stay, he has not freedom to be gone. So that *liberty* is not an idea belonging to volition, or preferring; but to the person having the power of doing, or forbearing to do, according as the mind shall choose or direct. Our *idea* of liberty reaches as far as that power, and no farther. For wherever restraint comes to check that power, or compulsion takes away that indifferency of ability on either side to act, or to forbear acting; there *liberty*, and our notion of it, presently ceases.

§ 11. *Voluntary opposed to Involuntary, not to Necessary.*

WE have instances enough, and often more than enough, in our own bodies. A man's heart beats, and the blood circulates, which it is not in his power by any thought or volition to stop; and therefore, in respect of these motions, where rest depends not on his choice,

nor would follow the determination of his mind, if it should prefer it, he is not a *free agent*. Colvulsive motions agitate his legs; so that though he *wills* it ever so much, he cannot by any power of his mind stop their motion (as in that odd disease called *chorea sancti viti*); but he is perpetually dancing: He is not at liberty in this action, but under as much necessity of moving, as a stone that falls, or a tennis-ball struck with a racket. On the other side, a palsy, or the stocks, hinder his legs from obeying the determination of his mind, if it would thereby transfer his body to another place. In all these there is want of *freedom*; though the sitting still even of a paralytic, whilst he prefers it to a removal, is truly voluntary. *Voluntary*, then, is not opposed to *necessary*, but to *involuntary*. For a man may prefer what he can do, to what he cannot do; the state he is in, to its absence or change, though necessity has made it in itself unalterable.

§ 12. *Liberty, what.*

As it is in the motions of the body, so it is in the thoughts of our minds: where any one is such, that we have power to take it up, or lay it by, according to the preference of the mind, there we are *at liberty*. A waking man, being under the necessity of having some *ideas* constantly in his mind, is not at *liberty* to think, or not to think; no more than he is at *liberty*, whether his body shall touch any other or no: But whether he will remove his contemplation from one *idea* to another, is many times in his choice; and then he is, in respect of his *ideas*, as much at *liberty*, as he is in respect of bodies he rests on: he can at pleasure remove himself from one to another. But yet some *ideas* to the mind, like some motions to the body, are such as in certain circumstances it cannot avoid, nor obtain their absence by the utmost effort it can use. A man on the rack is not at *liberty* to lay by the *idea* of pain, and divert himself with other contemplations: And sometimes a boisterous passion hurries our thoughts as a hurricane does our bodies, without leaving us the liberty of thinking on other things, which we would rather choose. But as soon as

the mind regains the power to stop or continue, begin or forbear, any of these motions of the body without, or thoughts within, according as it thinks fit to prefer either to the other, we then consider the man as a *free agent* again.

§ 13. *Necessity, what.*

WHEREVER thought is wholly wanting, or the power to act or forbear, according to the direction of thought, there *necessity* takes place. This in an agent capable of volition, when the beginning or continuation of any action is contrary to that preference of his mind, is called *compulsion*; when the hindering or stopping any action is contrary to his volition, it is called *restraint*. Agents that have no thought, no volition at all, are in every thing *necessary* agents.

§ 14. *Liberty belongs not to the Will.*

IF this be so (as I imagine it is), I leave it to be considered, whether it may not help to put an end to that long agitated, and I think unreasonable, because unintelligible question, viz. *Whether man's will be free, or no?* For if I mistake not, it follows from what I have said, that the question itself is altogether improper; and it is as insignificant to ask, whether man's *will* be free, as to ask, whether his sleep be swift, or his virtue square; *liberty* being as little applicable to the *will*, as swiftness of motion is to sleep, or squareness to virtue. Every one would laugh at the absurdity of such a question as either of these; because it is obvious, that the modifications of motion belong not to sleep, nor the difference of figure to virtue: And when any one well considers it, I think he will as plainly perceive, that *liberty*, which is but a power, belongs only to agents, and cannot be an attribute or modification of the *will*, which is also but a power.

§ 15. *Volition.*

SUCH is the difficulty of explaining and giving clear notions of internal actions by sounds, that I must here warn my reader, that *ordering, directing, choosing, preferring, &c.* which I have made use of, will not distinctly enough express *volition*, unless he will reflect on what

he himself does when he *wills*. For example, *prefer-
ring*, which seems perhaps best to express the act of *vo-
lition*, does it not precisely. For though a man would
prefer flying to walking, yet who can say he ever *wills*
it? *Volition*, it is plain, is an act of the mind know-
ingly exerting that dominion it takes itself to have over
any part of the man, by employing it in, or with-hold-
ing it from, any particular action. And what is the *will*,
but the faculty to do this? And is that faculty any thing
more in effect than a power, the power of the mind
to determine its thought, to the producing, continuing,
or stopping any action, as far as it depends on us? For
can it be denied, that whatever agent has a power to
think on its own actions, and to prefer their doing or
omission either to other, has that faculty called *will*?
Will, then, is nothing but such a power. *Liberty*, on
the other side, is the power a man has to do or forbear
doing any particular action, according as its doing or
forbearance has the actual preference in the mind; which
is the same thing as to say, according as he himself *wills*
it.

§ 16. *Powers belong to Agents.*

IT is plain, then, that the *will* is nothing but one power
or ability, and freedom another power or ability; so
that to ask, whether the *will has freedom*, is to ask, whe-
ther one power has another power, one ability another
ability: a question at first sight too grossly absurd to
make a dispute, or need an answer. For who is it that
sees not that *powers* belong only to *agents*, and are *at-
tributes only of substances*, and not of *powers* themselves?
So that this way of putting the question, viz. Whe-
ther the *will be free*? is in effect to ask, Whether the
will be a substance, an agent? or at least to suppose it,
since freedom can properly be attributed to nothing
else. If freedom can with any propriety of speech be
applied to power, it may be attributed to the power that
is in a man to produce, or forbear producing motion in
parts of his body, by choice or preference; which is
that which denominates him free, and is freedom itself.
But if any one should ask, whether freedom were free,

he would be suspected not to understand well what he said; and he would be thought to deserve Midas's ears, who knowing that rich was a denomination from the possession of riches, should demand whether riches themselves were rich.

§ 17.

HOWEVER the name *faculty*, which men have given to this power called the *will*, and whereby they have been led into a way of talking of the *will* as acting, may, by an appropriation that disguises its true sense, serve a little to palliate the absurdity; yet the *will* in truth signifies nothing but a power, or ability, to prefer or choose: And when the *will*, under the name of a *faculty*, is considered as it is, barely as an ability to do something, the absurdity in saying it is free, or not free, will easily discover itself. For if it be reasonable to suppose and talk of *faculties*, as distinct beings that can act (as we do when we say the *will* orders, and the *will* is free), it is fit that we should make a speaking *faculty*, and a walking *faculty*, and a dancing *faculty*, by which those actions are produced, which are but several modes of motion; as well as we make the *will* and *understanding* to be *faculties*, by which the actions of choosing and perceiving are produced, which are but several modes of thinking: And we may as properly say, that it is the singing *faculty* sings, and the dancing *faculty* dances, as that the *will* chooses, or that the *understanding* conceives; or, as is usual, that the *will* directs the *understanding*, or the *understanding* obeys, or obeys not the *will*. It being altogether as proper and intelligible to say, that the power of speaking directs the power of singing, or the power of singing obeys or disobeys the power of speaking.

§ 18.

THIS way of talking, nevertheless, has prevailed, and, as I guess, produced great confusion. For these being all different powers in the mind, or in the man, to do several actions, he exerts them as he thinks fit: but the power to do one action, is not operated on by the power of doing another action. For the power of thinking operates

not on the power of choofing, nor the power of choofing on the power of thinking; no more than the power of dancing operates on the power of finging, or the power of finging on the power of dancing; as any one who reflects on it will easily perceive: And yet this is it which we say, when we thus speak, that *the will operates on the understanding, or the understanding on the will.*

§ 19.

I GRANT, that this or that actual thought may be the occasion of volition, or exercising the power a man has to choofe; or the actual choice of the mind, the cause of actual thinking on this or that thing; as the actual finging of such a tune, may be the occasion of dancing such a dance, and the actual dancing of such a dance the occasion of finging such a tune. But in all these it is not one *power* that operates on another: But it is the mind that operates, and exerts these powers; it is the man that does the action, it is the agent that has power, or is able to do. For *powers* are relations, not agents: And *that which has the power or not the power to operate, is that alone which is or is not free*, and not the power itself. For freedom, or not freedom, can belong to nothing but what has or has not a power to act.

§ 20. *Liberty belongs not to the Will.*

THE attributing to *faculties* that which belonged not to them, has given occasion to this way of talking: But the introducing into discourses concerning the mind, with the name of *faculties*, a notion of their operating, has, I suppose, as little advanced our knowledge in that part of ourselves, as the great use and mention of the like invention of *faculties*, in the operations of the body, has helped us in the knowledge of physick. Not that I deny there are *faculties*, both in the body and mind: They both of them have their *powers* of operating, else neither the one nor the other could operate. For nothing can operate that is not able to operate; and that is not able to operate, that has no *power* to operate. Nor do I deny, that those words, and the like, are to have their place in the common use of lan-

guages, that have made them current. It looks like too much affectation wholly to lay them by: And philosophy itself, though it likes not a gaudy dress, yet, when it appears in public, must have so much complacency, as to be clothed in the ordinary fashion and language of the country, so far as it can consist with truth and perspicuity. But the fault has been that faculties have been spoken of and represented as so many distinct agents. For it being asked, What it was that digested the meat in our stomachs? It was a ready and very satisfactory answer, to say, That it was the *digestive faculty*. What was it that made any thing come out of the body? the *expulsive faculty*. What moved? the *motive faculty*. And so in the mind, the *intellectual faculty*, or the understanding understood; and the *elective faculty*, or the will, willed or commanded. Which is in short to say, That the ability to digest, digested; and the ability to move, moved; and the ability to understand, understood. For *faculty*, *ability*, and *power*, I think, are but different names of the same things; which ways of speaking, when put into more intelligible words, will, I think, amount to thus much: that digestion is performed by something that is able to digest, motion by something able to move, and understanding by something able to understand. And in truth it would be very strange if it should be otherwise, as strange as it would be, for a man to be free without being able to be free.

§ 21. *But to the Agent or Man.*

To return then to the inquiry about liberty, I think the question is not proper, *Whether the will be free?* but, *Whether a man be free?* Thus, I think,

1. That so far as any one can, by the direction or choice of his mind, preferring the existence of any action to the non-existence of that action, and *vice versa* make it to exist or not exist, so far he is free. For if I can by a thought directing the motion of my finger, make it move when it was at rest, or *vice versa*, it is evident, that in respect of that I am free; and if I can, by a like thought of my mind, preferring one

to the other, produce either words or silence, I am at liberty to speak, or hold my peace; and *as far as this power reaches, of acting, or not acting, by the determination of his own thought preferring either, so far is a man free.* For how can we think any one freer, than to have the power to do what he will? And so far as any one can, by preferring any action to its not being, or rest to any action, produce that action or rest, so far can he do what he will. For such a preferring of action to its absence, is the willing of it; and we can scarce tell how to imagine any *being* freer, than to be able to do what he *wills*. So that in respect of actions within the reach of such a power in him, a man seems as free, as it is possible for freedom to make him.

§ 22. *In respect of willing, a Man is not free.*

BUT the inquisitive mind of man, willing to shift off from himself, as far as he can, all thoughts of guilt, though it be by putting himself into a worse state than that of fatal necessity, is not content with this: Freedom, unless it reaches farther than this, will not serve the turn: And it passes for a good plea, that a man is not free at all, if he be not as free to will, as he is to act what he wills. Concerning a man's liberty, there yet therefore is raised this farther question, *Whether a man be free to will?* which I think is what is meant, when it is disputed, whether the *will* be free. And as to that I imagine,

§ 23.

2. THAT *willing, or volition, being an action, and freedom consisting in a power of acting or not acting, a man in respect of willing, or the act of volition, when any action in his power is once proposed to his thoughts, as presently to be done, cannot be free.* The reason whereof is very manifest: For it being unavoidable, that the action depending on his *will* should exist, or not exist; and its existence, or not existence, following perfectly the determination and preference of his will, he cannot avoid willing the existence, or not existence of that action; it is absolutely necessary that he *will* the one or the other, *i. e. prefer* the one to the other; since one of

them must necessarily follow ; and that which does follow, follows by the choice and determination of his mind, that is, by his *willing* it : for if he did not *will* it, it would not be. So that in respect of the act of *willing*, a man in such a case is not free : Liberty consisting in a power to act, or not to act ; which, in regard of volition, a man, upon such a proposal, has not. For it is unavoidably necessary to prefer the doing or forbearance of an action in a man's power, which is once so proposed to his thoughts ; a man must necessarily *will* the one or the other of them, upon which preference or volition, the action or its forbearance certainly follows, and is truly voluntary. But the act of volition, or preferring one of the two, being that which he cannot avoid, a man in respect of that act of *willing*, is under a necessity, and so cannot be free ; unless necessity and freedom can consist together, and a man can be free and bound at once.

§ 24.

THIS, then, is evident, that in all proposals of present action, *a man is not at liberty to will or not to will, because he can forbear willing* : Liberty consisting in a power to act or to forbear acting, and in that only. For a man that sits still, is said yet to be at liberty, because he can walk if he *wills* it. But if a man sitting still has not a power to remove himself, he is not at liberty ; so likewise a man falling down a precipice, though in motion, is not at liberty, because he cannot stop that motion if he would. This being so, it is plain that a man that is walking, to whom it is proposed to give off walking, is not at liberty whether he *will* determine himself to walk, or give off walking, or no : He must necessarily prefer one or the other of them, walking or not walking ; and so it is in regard of all other actions in our power so proposed, which are the far greater number. For considering the vast number of voluntary actions that succeed one another every moment that we are awake in the course of our lives, there are but few of them that are thought on or proposed to the *will*, till the time they are to be done :

And in all such actions, as I have shown, the mind in respect of *willing* has not a power to act, or not to act, wherein consists liberty. The mind in that case has not a power to forbear *willing*; it cannot avoid some determination concerning them, let the consideration be as short, the thought as quick as it will, it either leaves the man in the state he was before thinking, or changes it; continues the action, or puts an end to it. Whereby it is manifest, that it orders and directs one, in preference to or with neglect of the other, and thereby either the continuation or change becomes unavoidably voluntary.

§ 25. *The Will determined by something without it.*

SINCE, then, it is plain, that in most cases a man is not at liberty, whether he will or no; the next thing demanded, is, *Whether a man be at liberty to will which of the two he pleases, motion or rest?* This question carries the absurdity of it so manifestly in itself, that one might thereby sufficiently be convinced that liberty concerns not the will. For to ask, *Whether a man be at liberty to will either motion or rest, speaking or silence, which he pleases;* is to ask, *Whether a man can will what he wills, or be pleased with what he is pleased with.* A question which, I think, needs no answer; and they who can make a question of it, must suppose one will to determine the acts of another, and another to determine that; and so on *in infinitum*.

§ 26.

To avoid these and the like absurdities, nothing can be of greater use, than to establish in our minds determined *ideas* of the things under consideration. If the *ideas* of liberty and volition were well fixed in our understandings, and carried along with us in our minds, as they ought, through all the questions that are raised about them; I suppose a great part of the difficulties that perplex men's thoughts, and entangle their understandings, would be much easier resolved; and we should perceive where the confused signification of terms, or where the nature of the thing caused the obscurity.

§ 27. *Freedom.*

FIRST, then, It is carefully to be remembered, that *freedom consists in the dependence of the existence, or not existence of any action upon our volition of it; and not in the dependence of any action, or its contrary, on our preference.* A man standing on a cliff, is at liberty to leap twenty yards downwards into the sea, not because he has a power to do the contrary action, which is to leap twenty yards upwards, for that he cannot do; but he is therefore free, because he has a power to leap or not to leap. But if a greater force than his either holds him fast, or tumbles him down, he is no longer free in that case; because the doing or forbearance of that particular action is no longer in his power. He that is a close prisoner in a room twenty foot square, being at the north side of his chamber, is at liberty to walk twenty foot southward, because he can walk or not walk it; but is not, at the same time, at liberty to do the contrary, *i. e.* to walk twenty foot northward.

In this, then, consists freedom, *viz.* in our being able to act or not to act, according as we shall choose or will.

§ 28. *Volition, what.*

SECONDLY, We must remember, that *volition or willing*, is an act of the mind directing its thought to the production of any action, and thereby exerting its power to produce it. To avoid multiplying of words, I would crave leave here, under the word *action*, to comprehend the forbearance too of any action proposed; *sitting still*, or *holding one's peace*, when *walking or speaking* are proposed, though mere forbearances, requiring as much the determination of the *will*, and being often as weighty in their consequences as the contrary actions, may, on that consideration, well enough pass for actions to: But this I say, that I may not be mistaken, if for brevity sake I speak thus.

§ 29. *What determines the Will.*

THIRDLY, The *will* being nothing but a power in the mind to direct the operative faculties of a man to motion or rest, as far as they depend on such direction:

To the question, What is it determines the will? the true and proper answer is, The mind. For that which determines the general power of directing to this or that particular direction, is nothing but the agent itself exercising the power it has that particular way. If this answer satisfies not, it is plain the meaning of the question, *What determines the will?* is this, What moves the mind, in every particular instance, to determine its general power of directing to this or that particular motion or rest? And to this I answer, The motive for continuing in the same state or action, is only the present satisfaction in it; the motive to change, is always some *uneasiness*: nothing setting us upon the change of state, or upon any new action, but some *uneasiness*. This is the great motive that works on the mind to put it upon action, which for shortness sake we will call *determining of the will*; which I shall more at large explain.

§ 30. *Will and Desire must not be confounded.*

BUT in the way to it, it will be necessary to premise, that though I have above endeavoured to express the act of *volition* by *choosing*, *preferring*, and the like terms, that signify *desire* as well as *volition*, for want of other words to mark that act of the mind, whose proper name is *willing* or *volition*; yet it being a very simple act, whosoever desires to understand what it is, will better find it by reflecting on his own mind, and observing what it does when it *wills*, than by any variety of articulate sounds whatsoever. This caution of being careful not to be misled by expressions that do not enough keep up the difference between the *will* and several acts of the mind that are quite distinct from it, I think the more necessary; because I find the will often confounded with several of the affections, especially *desire*, and one put for the other; and that by men who would not willingly be thought not to have had very distinct notions of things, and not to have writ very clearly about them. This, I imagine, has been no small occasion of obscurity and mistake in this matter; and therefore is, as much as may be, to be

avoided. For he that shall turn his thoughts inwards upon what passes in his mind when he *wills*, shall see that the *will* or power of *volition* is conversant about nothing, but that particular determination of the mind, whereby barely by a thought the mind endeavours to give rise, continuation, or stop to any action which it takes to be in its power. This well considered, plainly shows that the *will* is perfectly distinguished from *desire*; which in the very same action may have a quite contrary tendency from that which our *will* sets us upon. A man whom I cannot deny, may oblige me to use persuasions to another, which, at the same time, I am speaking, I may wish may not prevail on him. In this case, it is plain the *will* and *desire* run counter. I will the action that tends one way, whilst my desire tends another, and that the direct contrary. A man who, by a violent fit of the gout in his limbs, finds a doziness in his head, or a want of appetite in his stomach removed, desires to be eased too of the pain of his feet or hands (for wherever there is pain, there is a desire to be rid of it); though yet, whilst he apprehends that the removal of the pain may translate the noxious humour to a more vital part, his *will* is never determined to any one action that may serve to remove this pain. Whence it is evident, that *desiring* and *willing* are two distinct acts of the mind; and consequently that the *will*, which is but the power of *volition*, is much more distinct from *desire*.

§ 31. *Uneasiness determines the Will.*

To return then to the inquiry, *What is it that determines the will in regard to our actions?* And that, upon second thoughts, I am apt to imagine is not, as is generally supposed, the greater good in view; but some (and for the most part the most pressing) *uneasiness* a man is at present under. This is that which successively determines the *will*, and sets us upon those actions we perform. This *uneasiness* we may call, as it is, *desire*; which is an *uneasiness* of the mind for want of some absent good. All pain of the body, of what sort soever, and disquiet of the mind, is *uneasiness*: And

with this is always joined desire, equal to the pain or *uneasiness* felt, and is scarce distinguishable from it. For *desire* being nothing but an *uneasiness* in the want of an absent good, in reference to any pain felt, ease is that absent good; and till that ease be attained, we may call it *desire*, nobody feeling pain that he wishes not to be eased of, with a desire equal to that pain, and inseparable from it. Besides this desire of ease from pain, there is another of absent positive good; and here also the desire and uneasiness is equal. As much as we desire any absent good, so much are we in pain for it. But here all absent good does not, according to the greatness it has, or is acknowledged to have, cause pain equal to that greatness; as all pain causes desire equal to itself: because the absence of good is not always a pain, as the presence of pain is. And therefore absent good may be looked on, and considered without *desire*. But so much as there is any where of *desire*, so much there is of *uneasiness*.

§ 32. *Desire is Uneasiness.*

THAT *desire* is a state of *uneasiness*, every one who reflects on himself will quickly find. Who is there that has not felt in *desire* what the wise man says of hope (which is not much different from it) that it being *deferred makes the heart sick*? and that still proportionable to the greatness of the *desire*; which sometimes raises the *uneasiness* to that pitch, that it makes people cry out, *Give me children, give me the thing desired, or I die*? Life itself, and all its enjoyments, is a burden cannot be borne under the lasting and unremoved pressure of such an *uneasiness*.

§ 33. *The Uneasiness of Desire determines the Will.*

Good and evil, present and absent, it is true, work upon the mind: but that which immediately determines the *will*, from time to time, to every voluntary action, is the uneasiness of *desire*, fixed on some absent good; either negative, as indolence to one in pain, or positive, as enjoyment of pleasure. That it is this *uneasiness* that determines the *will* to the successive voluntary actions, whereof the greatest part of our lives is made

up, and by which we are conducted through different courses to different ends; I shall endeavour to show, both from experience and the reason of the thing.

§ 34. *This the Spring of Action.*

WHEN a man is perfectly content with the state he is in, which is when he is perfectly without any *uneasiness*, what industry, what action, what *will* is there left, but to continue in it? Of this every man's observation will satisfy him. And thus we see our all-wise Maker, suitable to our constitution and frame, and knowing what it is that determines the *will*, has put into man the *uneasiness* of hunger and thirst, and other natural desires, that return at their seasons, to move and determine their *wills*, for the preservation of themselves, and the continuation of their species. For I think we may conclude, that if the bare contemplation of these good ends, to which we are carried by these several *uneasinesses*, had been sufficient to determine the *will*, and set us on work, we should have had none of these natural pains, and perhaps in this world little or no pain at all. *It is better to marry than to burn*, says St. Paul; where we may see what it is that chiefly drives men into the enjoyments of a conjugal life. A little burning felt, pushes us more powerfully, than greater pleasures in prospect draw or allure.

§ 35. *The greatest positive Good determines not the Will, but Uneasiness.*

It seems so established and settled a maxim by the general consent of all mankind, that good, the greater good, determines the will, that I do not at all wonder, that when I first published my thoughts on this subject, I took it for granted; and I imagine, that by a great many I shall be thought more excusable, for having then done so, than that now I have ventured to recede from so received an opinion. But yet upon a stricter inquiry, I am forced to conclude, that good, the greater good, though apprehended and acknowledged to be so, does not determine the *will*, until our desire, raised proportionably to it, makes us *uneasy* in the want of it. Convince a man ever so much, that plenty has its ad-

vantages over poverty ; make him see and own, that the handsome conveniences of life are better than nasty penury ; yet as long as he is content with the latter, and finds no *uneasiness* in it, he moves not : his *will* never is determined to any action that shall bring him out of it. Let a man be ever so well persuaded of the advantages of virtue, that it is as necessary to a man who has any great aims in this world, or hopes in the next, as food to life ; yet till he *hungers and thirsts after righteousness*, till he feels an *uneasiness* in the want of it, his *will* will not to be determined to any action in pursuit of this confessed greater good ; but any other *uneasinesses* he feels in himself, shall take place, and carry his *will* to other actions. On the other side, let a drunkard see that his health decays, his estate wastes ; discredit and diseases, and the want of all things, even of his beloved drink, attends him in the course he follows ; yet the returns of *uneasiness* to miss his companions, the habitual thirst after his cups, at the usual time, drives him to the tavern, though he has in his view the loss of health and plenty, and perhaps of the joys of another life : the least of which is no inconsiderable good, but such as he confesses is far greater than the tickling of his palate with a glass of wine, or the idle chat of a foaking club. It is not for want of viewing the greater good ; for he sees and acknowledges it, and in the intervals of his drinking hours, will take resolutions to pursue the greater good ; but when the *uneasiness* to miss his accustomed delight returns, the greater acknowledged good loses its hold, and the present *uneasiness* determines the *will* to the accustomed action ; which thereby gets stronger footing to prevail against the next occasion, though he at the same time makes secret promises to himself, that he will do so no more ; this is the last time he will act against the attainment of those greater goods. And thus he is from time to time in the state of that unhappy complainer, *Video meliora proboque, deteriora sequor* : Which sentence, allowed for true, and made good by constant experi-

ence, may this, and possibly no other way, be easily made intelligible.

§ 36. *Because the Removal of Uneasiness is the first Step to Happiness.*

IF we inquire into the reason of what experience makes so evident in fact, and examine why it is *uneasiness* alone operates on the *will*, and determines it in its choice; we shall find that we being capable but of one determination of the *will* to one action at once; the present *uneasiness* that we are under does naturally determine the will, in order to that happiness which we all aim at in all our actions; forasmuch as whilst we are under any *uneasiness*, we cannot apprehend ourselves happy, or in the way to it. Pain and *uneasiness* being by every one concluded and felt to be inconsistent with happiness, spoiling the relish even of those good things which we have; a little pain serving to mar all the pleasure we rejoiced in. And therefore that which of course determines the choice of our *will* to the next action, will always be the removing of pain, as long as we have any left, as the first and necessary step towards happiness.

§ 37. *Because Uneasiness alone is present.*

ANOTHER reason why it is *uneasiness* alone determines the will, may be this; because that alone is present, and it is against the nature of things, that what is absent should operate where it is not. It may be said, that absent good may, by contemplation, be brought home to the mind, and made present. The *idea* of it indeed may be in the mind, and viewed as present there; but nothing will be in the mind as a present good, able to counterbalance the removal of any *uneasiness* which we are under, till it raises our desire; and the *uneasiness* of that has the prevalency in determining the *will*. Till then the *idea* in the mind of whatever good, is there only like other *ideas*, the object of bare unactive speculation, but operates not on the *will*, nor sets us on work; the reason whereof I shall show by and by. How many are to be found, that have had lively representations set before their minds of the unspeak-

able joys of heaven, which they acknowledge both possible and probable too, who yet would be content to take up with their happiness here? And so the prevailing *uneasiness* of their desires, let loose after the enjoyments of this life, take their turns in the determining their *wills*; and all that while they take not one step, are not one jot moved towards the good things of another life, considered as ever so great.

§ 38. *Because all who allow the Joys of Heaven possible, pursue them not.*

WERE the *will* determined by the views of good, as it appears in contemplation greater or less to the understanding, which is the state of all absent good, and that which in the received opinion the *will* is supposed to move to, and to be moved by, I do not see how it could ever get loose from the infinite eternal joys of heaven, once proposed and considered as possible. For all absent good, by which alone, barely proposed and coming in view, the *will* is thought to be determined, and so to set us on action, being only possible, but not infallibly certain; it is unavoidable that the infinitely greater possible good should regularly and constantly determine the *will* in all the successive actions it directs: and then we should keep constantly and steadily in our course towards heaven, without ever standing still, or directing our actions to any other end. The eternal condition of a future state infinitely outweighing the expectation of riches, or honour, or any other worldly pleasure which we can propose to ourselves, though we should grant these the more probable to be attained: For nothing future is yet in possession, and so the expectation even of these may deceive us. If it were so, that the greater good in view determines the *will*, so great a good once proposed could not but seize the *will*, and hold it fast to the pursuit of this infinitely greatest good, without ever letting it go again: For the *will* having a power over, and directing the thoughts as well as other actions, would, if it were so, hold the contemplation of the minds fixed to that good.

But any great Uneasiness is never neglected.

THIS would be the state of the mind, and regular tendency of the *will* in all its determinations, were it determined by that which is considered, and in view the greater good; but that it is not so, is visible in experience: The infinitely greatest confessed good being often neglected, to satisfy the successive *uneasiness* of our desires pursuing trifles. But though the greatest allowed, even everlasting unspeakable good, which has sometimes moved and affected the mind, does not steadfastly hold the *will*, yet we see any very great and prevailing *uneasiness*, having once laid hold on the *will*, lets it not go: by which we may be convinced what it is that determines the *will*. Thus any vehement pain of the body, the ungovernable passion of a man violently in love, or the impatient desire of revenge, keeps the *will* steady and intent; and the *will* thus determined never lets the understanding lay by the object, but all the thoughts of the mind, and powers of the body, are uninterruptedly employed that way, by the determinations of the *will*, influenced by that topping *uneasiness* as long as it lasts; whereby it seems to me evident, that the *will* or power of setting us upon one action in preference to all other, is determined in us by *uneasiness*. And whether this be not so, I desire every one to observe in himself.

§ 39. *Desire accompanies all Uneasiness.*

I HAVE hitherto chiefly instanced in the *uneasiness* of desire, as that which determines the *will*; because that is the chief and most sensible, and the *will* seldom orders any action, nor is there any voluntary action performed, without some *desire* accompanying it; which I think is the reason why the *will* and *desire* are so often confounded. But yet we are not to look upon the *uneasiness* which makes up, or at least accompanies most of the other passions, as wholly excluded in the case. *Aversion*, *fear*, *anger*, *envy*, *shame*, &c. have each their *uneasiness* too, and thereby influence the *will*. These passions are scarce any of them in life and practice simple and alone, and wholly unmixed with others; though

usually in discourse and contemplation, that carries the name which operates strongest, and appears most in the present state of the mind : Nay there is, I think, scarce any of the passions to be found without *desire* joined with it. I am sure, wherever there is *uneasiness*, there is *desire* : For we constantly desire happiness ; and whatever we feel of *uneasiness*, so much it is certain we want of happiness, even in our own opinion, let our state and condition otherwise be what it will. Besides, the present moment not being our eternity, whatever our enjoyment be, we look beyond the present, and desire goes with our foresight, and that still carries the *will* with it. So that even in *joy* itself, that which keeps up the action, whereon the enjoyment depends, is the desire to continue it, and fear to lose it : And whenever a greater *uneasiness* than that takes place in the mind, the *will* presently is by that determined to some new action, and the present delight neglected.

§ 40. *The most pressing Uneasiness naturally determines the Will.*

BUT we being in this world beset with sundry *uneasinesses*, distracted with different *desires*, the next inquiry naturally will be, which of them has the precedency in determining the *will* to the next action ? and to that the answer is, That ordinarily which is the *most* pressing of those that are judged capable of being then removed. For the *will*, being the power of directing our operate faculties to some action, for some end, cannot at any time be moved towards what is judged at that time unattainable : that would be to suppose an intelligent being designedly to act for an end, only to lose its labour, for so it is to act for what is judged not attainable ; and therefore very great *uneasinesses* move not the *will*, when they are judged not capable of a cure : They, in that case, put us not upon endeavours. But these set apart, the most important and urgent *uneasiness* we at that time feel, is that which ordinarily determines the *will* successively, in that train of voluntary actions which makes up our lives. The greatest present *uneasiness* is the spur to action, that is constantly felt, and for most part de-

termines the *will* in its choice of the next action. For this we must carry along with us, that the proper and only object of the *will* is some action of ours, and nothing else: For we producing nothing by our *willing* it, but some action in our power, it is there the *will* terminates, and reaches no farther.

§ 41. *All desire Happiness.*

IF it be farther asked what it is moves *desire*? I answer, Happiness, and that alone. *Happiness* and *misery* are the names of two extremes, the utmost bounds whereof we know not; it is what *eye hath not seen, ear hath not heard, nor hath it entered into the heart of man to conceive*. But of some degrees of both we have very lively impressions, made by several instances of delight and joy on the one side, and torment and sorrow on the other; which, for shortness sake, I shall comprehend under the names of pleasure and pain, there being pleasure and pain of the mind as well as the body: *With him is fulness of joy, and pleasure for evermore*. Or, to speak truly, they are all of the mind; though some have their rise in the mind from thought, others in the body from certain modifications of motion.

§ 42. *Happiness, what.*

HAPPINESS, then, in its full extent is the utmost pleasure we are capable of, and *misery* the utmost pain: And the lowest degree of what can be called *happiness*, is so much ease from all pain, and so much present pleasure, as without which any one cannot be content. Now, because pleasure and pain are produced in us by the operation of certain objects, either on our minds or our bodies, and in different degrees: Therefore what has an aptness to produce pleasure in us, is that we call *good*; and what is apt to produce pain in us we call *evil*, for no other reason, but for its aptness to produce pleasure and pain in us, wherein consists our *happiness* and *misery*. Farther, though what is apt to produce any degree of pleasure, be in itself *good*; and what is apt to produce any degree of pain, be *evil*: yet it often happens, that we do not call it so, when it comes in competition with a greater of its sort; because when

they come in competition, the degrees also of pleasure and pain have justly a preference. So that if we will rightly estimate what we call *good* and *evil*, we shall find it lies much in comparison: For the cause of every less degree of pain, as well as every greater degree of pleasure, has the nature of *good*, and *vice versa*.

§ 43. *What Good is desired, what not.*

THOUGH this be that which is called *good* and *evil*, and all good be the proper object of *desire* in general; yet all good, even seen, and confessed to be so, does not necessarily move every particular man's *desire*, but only that part, or so much of it as is considered and taken to make a necessary part of his happiness. All other good, however great in reality or appearance, excites not a man's *desires*, who looks not on it to make a part of that happiness, wherewith he, in his present thoughts, can satisfy himself. *Happiness*, under this view, every one constantly pursues, and *desires* what makes any part of it: other things, acknowledged to be good, he can look upon without *desire*, pass by, and be content without. There is nobody, I think, so senseless as to deny, that there is pleasure in knowledge: And for the pleasures of sense, they have too many followers to let it be questioned, whether men are taken with them or no. Now, let one man place his satisfaction in sensual pleasures, another in the delight of knowledge: Though each of them cannot but confess, there is great pleasure in what the other pursues; yet neither of them making the other's delight a part of his happiness, their *desires* are not moved, but each is satisfied without what the other enjoys, and so his will is not determined to the pursuit of it. But yet as soon as the studious man's hunger and thirst makes him *uneasy*, he whose *will* was never determined to any pursuit of good cheer, poignant sauces, delicious wine, by the pleasant taste he has found in them, is, by the *uneasiness* of hunger and thirst, presently determined to eating and drinking, though possibly with great indifferency, what wholesome food comes in his way. And, on the other side, the epicure buckles to study, when shame, or the desire to recommend him-

self to his mistress, shall make him *uneasy* in the want of any sort of knowledge. Thus, how much soever men are in earnest, and constant in pursuit of happiness; yet they may have a clear view of good, great and confessed good, without being concerned for it, or moved by it, if they think they can make up their happiness without it. Though as to pain, that they are always concerned for; they can feel no *uneasiness* without being moved. And therefore being *uneasy* in the want of whatever is judged necessary to their happiness, as soon as any good appears to make a part of their proportion of happiness, they begin to *desire* it.

§ 44. *Why the greatest Good is not always desired.*

THIS, I think, any one may observe in himself and others, that the *greater visible good* does not always raise men's *desires*, in proportion to the greatness it appears, and is acknowledged to have; though every little trouble moves us, and sets us on work to get rid of it. The reason whereof is evident from the nature of our *happiness* and *misery* itself. All present pain, whatever it be, makes a part of our present *misery*: But all absent good does not at any time make a necessary part of our present *happiness*, nor the absence of it make a part of our *misery*. If it did, we should be constantly and infinitely miserable; there being infinite degrees of happiness, which are not in our possession. All *uneasiness*, therefore, being removed, a moderate portion of good serves at present to content men; and some few degrees of pleasure, in a succession of ordinary enjoyments, make up a happiness wherein they can be satisfied. If this were not so, there could be no room for those indifferent and visibly trifling actions, to which our *wills* are so often determined, and wherein we voluntarily waste so much of our lives; which remissness could by no means consist with a constant determination of *will* or *desire* to the greatest apparent good. That this is so, I think few people need go far from home to be convinced; and indeed in this life there are not many whose happiness reaches so far as to afford them a constant train of moderate mean pleasures, without any mixture of *uneasi-*

ness; and yet they could be content to stay here for ever; though they cannot deny, but that it is possible there may be a state of eternal durable joys after this life, far surpassing all the good that is to be found here. Nay, they cannot but see, that it is more possible than the attainment and continuation of that pittance of honour, riches, or pleasure, which they pursue, and for which they neglect that eternal state: But yet, in full view of this difference, satisfied of the possibility of a perfect, secure, and lasting happiness in a future state, and under a clear conviction, that it is not to be had here, whilst they bound their happiness within some little enjoyment, or aim of this life, and exclude the joys of heaven from making any necessary part of it; their desires are not moved by this greater apparent good, nor their *will*s determined to any action, or endeavour for its attainment.

§ 45. *Why not being desired, it moves not the Will.*

THE ordinary necessities of our lives fill a great part of them with the *uneasiness* of hunger, thirst, heat, cold, weariness with labour, and sleepiness, in their constant returns, &c. To which, if besides accidental harms, we add the fantastical *uneasiness* (as itch after honour, power, or riches, &c.), which acquired habits by fashion, example, and education, have settled in us, and a thousand other irregular desires, which custom has made natural to us, we shall find, that a very little part of our life is so vacant from these *uneasinesses*, as to leave us free to the attraction of remoter absent good. We are seldom at ease, and free enough from the solicitation of our natural or adopted desires, but a constant succession of *uneasinesses* out of that stock, which natural wants or acquired habits have heaped up, take the *will* in their turns: and no sooner is one action despatched, which by such a determination of the *will* we are set upon, but another *uneasiness* is ready to set us on work. For the removing of the pains we feel, and are at present pressed with, being the getting out of misery, and consequently the first thing to be done in order to happiness, absent good, though thought on, confessed, and

appearing to be good, not making any part of this unhappiness in its absence, is jostled out to make way for the removal of those *uneasinesses* we feel; till due and repeated contemplation has brought it nearer to our mind, given some relish of it, and raised in us some desire; which then beginning to make a part of our present *uneasiness*, stands upon fair terms with the rest, to be satisfied; and so, according to its greatness and pressure, comes in its turn to determine the *will*.

§ 46. *Due Consideration raises Desire.*

AND thus, by a due consideration, and examining any good proposed, it is in our power to raise our desires in a due proportion to the value of that good, whereby, in its turn and place, it may come to work upon the *will*, and be pursued. For good, though appearing, and allowed ever so great, yet till it has raised desires in our minds, and thereby made us *uneasy* in its want, it reaches not our *wills*; we are not within the sphere of its activity; our *wills* being under the determination only of those *uneasinesses* which are present to us, which (whilst we have any) are always soliciting, and ready at hand to give the *will* its next determination: the balancing, when there is any in the mind, being only which desire shall be next satisfied, which *uneasiness* first removed. Whereby it comes to pass, that as long as any *uneasiness*, any desire, remains in our mind, there is no room for good, barely as such, to come at the *will*, or at all to determine it; because, as has been said, the first step in our endeavours after happiness being to get wholly out of the confines of misery, and to feel no part of it, the *will* can be at leisure for nothing else, till every *uneasiness* we feel be perfectly removed; which, in the multitude of wants and desires we are beset with in this imperfect state, we are not like to be ever freed from in this world.

§ 47. *The Power to suspend the Prosecution of any Desire, makes way for Consideration.*

THERE being in us a great many *uneasinesses* always soliciting, and ready to determine the *will*, it is natural, as I have said, that the greatest and most pressing should

determine the *will* to the next action : and so it does for the most part, but not always. For the mind having in most cases, as is evident in experience, a power to *suspend* the execution and satisfaction of any of its desires, and so all, one after another, is at liberty to consider the objects of them, examine them on all sides, and weigh them with others. In this lies the liberty man has ; and from the not using of it right comes all that variety of mistakes, errors, and faults, which we run into in the conduct of our lives, and our endeavours after happiness ; whilst we precipitate the determination of our *wills*, and engage too soon before due *examination*. To prevent this, we have a power to *suspend* the prosecution of this or that desire, as every one daily may experiment in himself. This seems to me the source of all liberty ; in this seems to consist that which is (as I think improperly) called *free-will*. For during this *suspension* of any desire, before the *will* be determined to action, and the action (which follows that determination) done, we have opportunity to examine, view, and judge of the good or evil of what we are going to do ; and when upon due *examination*, we have judged, we have done our duty, all that we can or ought to do in pursuit of our happiness, and it is not a fault, but a perfection of our nature, to desire, will, and act, according to the last result of a fair *examination*.

§ 48. *To be determined by our own Judgment, is no Restraint to Liberty.*

THIS is so far from being a restraint or diminution of *freedom*, that it is the very improvement and benefit of it ; it is not an abridgment, it is the end and use of our *liberty* : and the farther we are removed from such a determination, the nearer we are to misery and slavery. A perfect indifferency in the mind, not determinable by its last judgment of the good or evil that is thought to attend its choice, would be so far from being an advantage, and excellency of an intellectual nature, that it would be as great an imperfection, as the want of indifferency to act, or not to act, till determined by the *will*, would be an imperfection on the other side. A

man is at liberty to lift up his hand to his head, or let it rest quiet: He is perfectly indifferent in either; and it would be an imperfection in him, if he wanted that power, if he were deprived of that indifferency. But it would be as great an imperfection if he had the same indifferency, whether he would prefer the lifting up his hand, or its remaining in rest, when it would save his head or eyes from a blow he sees coming: *It is as much a perfection, that desire, or the power of preferring, should be determined by good,* as that the power of acting should be determined by the *will*; and the certainer such determination is, the greater is the perfection. Nay, were we determined by any thing but the last result of our own minds, judging of the good or evil of any action, we were not free; the very end of our freedom being, that we may attain the good we choose; and therefore every man is put under a necessity by his constitution, as an intelligent being, to be determined in *willing* by his own thought and judgment what is best for him to do; else he would be under the determination of some other than himself, which is want of liberty. And to deny that a man's *will*, in every determination, follows his own judgment, is to say, that a man's *wills* and acts for an end that he would not have, at the time that he *wills* and acts for it. For if he prefers it in his present thoughts before any other, it is plain he then thinks better of it; and would have it before any other; unless he can have and not have it, *will* and not *will* it, at the same time; a contradiction too manifest to be admitted!

§ 49. *The freest Agents are so determined.*

IF we look upon those *superior beings* above us, who enjoy perfect happiness, we shall have reason to judge that they are more steadily *determined in their choice of good* than we; and yet we have no reason to think they are less happy, or less free than we are. And if it were fit for such poor finite creatures as we are, to pronounce what Infinite Wisdom and Goodness could do, I think we might say, that God himself cannot choose what is not

good; the freedom of the Almighty hinders not his being determined by what is best.

§ 50. *A constant Determination to a pursuit of Happiness, no Abridgment of Liberty.*

BUT to give a right view of this mistaken part of liberty, let me ask, would any one be a changeling, because he is less determined by wise considerations than a wise man? is it worth the name of *freedom*, to be at liberty to play the fool, and draw shame and misery upon a man's self? if to break loose from the conduct of reason, and to want that restraint of examination and judgment, which keeps us from choosing or doing the worse, be *liberty*, true liberty, madmen and fools are the only free men: but yet, I think, nobody would choose to be mad for the sake of such *liberty*, but he that is mad already. The constant desire of happiness, and the constraint it puts upon us to act for it, nobody, I think, accounts an abridgment of *liberty*, or at least an abridgment of *liberty* to be complained of. God Almighty himself is under the necessity of being happy; and the more any intelligent being is so, the nearer is its approach to infinite perfection and happiness. That in this state of ignorance we short-sighted creatures might not mistake true felicity, we are endowed with a power to suspend any particular desire, and keep it from determining the *will*, and engaging us in action. This is *standing still*, where we are not sufficiently assured of the way: Examination is *consulting a guide*. The determination of the *will*, upon inquiry, is *following the direction of that guide*: And he that has a power to act or not to act, according as such determination directs, is a *free agent*; such determination abridges not that power wherein liberty consists. He that has his chains knocked off, and the prison-doors set open to him, is perfectly at *liberty*, because he may either go or stay, as he best likes: though his preference be determined to stay, by the darkness of the night, or illness of the weather, or want of other lodging. He ceases not to be free, though the desire of some convenience to be had there abso-

lutely determines his preference, and makes him stay in his prison.

§ 51. *The Necessity of pursuing the Happiness, the Foundation of Liberty.*

As, therefore, the highest perfection of intellectual nature lies in a careful and constant pursuit of true and solid happiness, so the care of ourselves, that we mistake not imaginary for real happiness, is the necessary foundation of our *liberty*. The stronger ties we have to an unalterable pursuit of happiness in general, which is our greatest good, and which, as such, our desires always follow, the more are we free from any necessary determination of our *will* to any particular action, and from a necessary compliance with our desire, set upon any particular, and then appearing preferable good, till we have duly examined, whether it has a tendency to, or be inconsistent with, our real happiness: And therefore, till we are as much informed upon this inquiry, as the weight of the matter, and the nature of the case demands, we are, by the necessity of preferring and pursuing true happiness as our greatest good, obliged to suspend the satisfaction of our desire in particular cases.

§ 52. *The Reason of it.*

THIS is the hinge on which turns the *liberty* of intellectual beings, in their constant endeavours after, and steady prosecution of, true felicity, that they can *suspend* this prosecution in particular cases, till they have looked before them, and informed themselves whether that particular thing, which is then proposed or desired, lie in the way to their main end, and make a real part of that which is their greatest good: for the inclination and tendency of their nature to happiness, is an obligation and motive to them, to take care not to mistake or miss it; and so necessarily puts them upon caution, deliberation, and wariness, in the direction of their particular actions, which are the means to obtain it. Whatever necessity determines to the pursuit of real bliss, the same necessity with the same force establishes *suspense*, *deliberation*, and scrutiny of each successive desire, whether the sa-

tisfaction of it does not interfere with our true happiness, and mislead us from it. This, as seems to me, is the great privilege of finite intellectual beings; and I desire it may be well considered, whether the great inlet and exercise of all the *liberty* men have, are capable of, or can be useful to them, and that whereon depends the turn of their actions, does not lie in this, that they can *suspend* their desires, and stop them from determining their *wills* to any action, till they have duly and fairly *examined* the good and evil of it, as far forth as the weight of the thing requires. This we are able to do; and when we have done it, we have done our duty, and all that is in our power, and indeed all that needs. For since the *will* supposes knowledge to guide its choice, all that we can do, is to hold our *wills* undetermined, till we have *examined* the good and evil of what we desire. What follows after that, follows in a chain of consequences linked one to another, all depending on the last determination of the judgment; which, whether it shall be upon a hasty and precipitate view, or upon a due and mature *examination*, is in our power; experience showing us, that in most cases we are able to suspend the present satisfaction of any desire.

§ 53. *Government of our Passions, the right Improvement of Liberty.*

BUT if any extreme disturbance (as sometimes it happens) possesses our whole mind, as when the pain of the rack, an impetuous *uneasiness*, as of love, anger, or any other violent passion running away with us, allows us not the liberty of thought, and we are not masters enough of our own minds to consider thoroughly and *examine* fairly; God, who knows our frailty, pities our weakness, and requires of us no more than we are able to do, and sees what was and what was not in our power, will judge as a kind and merciful Father. But the forbearance of a too hasty compliance with our desires, the moderation and restraint of our passions, so that our understandings may be *free* to examine, and reason unbiassed give its judgment, being that whereon a right direction of our conduct to true happiness de-

pend; it is in this we should employ our chief care and endeavours. In this we should take pains to suit the relish of our minds to the true intrinsic good or ill that is in things, and not permit an allowed or supposed possible great and weighty good to slip out of our thoughts, without leaving any relish, any desire of itself there, till, by a due consideration of its true worth, we have formed appetites in our minds suitable to it, and made ourselves uneasy in the want of it, or in the fear of losing it. And how much this is in every one's power, by making resolutions to himself, such as he may keep, is easy for every one to try. Nor let any one say, he cannot govern his passions, nor hinder them from breaking out, and carrying him into action; for what he can do before a prince, or a great man, he can do alone, or in the presence of God, if he will.

§ 54. *How men come to pursue different Courses.*

FROM what has been said, it is easy to give account how it comes to pass, that though all men desire happiness, yet their *wills carry them so contrarily*, and consequently some of them to what is evil. And to this I say, that the various and contrary choices that men make in the world, do not argue that they do not all pursue good, but that the same thing is not good to every man alike. This variety of pursuits shows, that every one does not place his happiness in the same thing, or choose the same way to it. Were all the concerns of man terminated in this life, why one followed study and knowledge, and another hawking and hunting: why one chose luxury and debauchery, and another sobriety and riches; would not be, because every one of these did not aim at his own happiness, but because their *happiness* was placed in different things; and therefore it was a right answer of the physician to his patient that had sore eyes, If you have more pleasure in the taste of wine than in the use of your sight, wine is good for you; but if the pleasure of seeing be greater to you than that of drinking, wine is naught.

§ 55.

THE mind has a different relish, as well as the palate;

and you will as fruitlessly endeavour to delight all men with riches or glory (which yet some men place their happiness in), as you would to satisfy all men's hunger with cheese or lobsters; which, though very agreeable and delicious fare to some, are to others extremely nauseous and offensive: And many people would with reason prefer the griping of an hungry belly, to those dishes which are a feast to others. Hence it was, I think, that the philosophers of old did in vain inquire, whether *summum bonum* consisted in riches, or bodily delights, or virtue, or contemplation. And they might have as reasonably disputed, whether the best relish were to be found in apples, plums, or nuts; and have divided themselves into sects upon it. For as pleasant tastes depend not on the things themselves, but their agreeableness to this or that particular palate, wherein there is great variety; so the greatest happiness consists in the having those things which produce the greatest pleasure, and in the absence of those which cause any disturbance, any pain. Now these, to different men, are very different things. If, therefore, men in this life only have hope, if in this life they can only enjoy, it is not strange nor unreasonable, that they should seek their happiness by avoiding all things that diseased them here, and by pursuing all that delight them; wherein it will be no wonder to find variety and difference. For if there be no prospect beyond the grave, the inference is certainly right, *Let us eat and drink, let us enjoy what we delight in, for to-morrow we shall die.* This, I think, may serve to show us the reason, why, though all men's desires tend to happiness, yet they are not moved by the same object. Men may choose different things, and yet all choose right; supposing them only like a company of poor insects, whereof some are bees, delighted with flowers and their sweetness; others beetles, delighted with other kinds of viands; which having enjoyed for a season, they should cease to be, and exist no more for ever.

§ 56. *How men come to choose Ill.*

THESE things duly weighed, will give us, as I think, a

clear view into the state of human liberty. Liberty, it is plain, consists in a power to do, or not to do; to do, or forbear doing as we *will*. This cannot be denied. But this seeming to comprehend only the actions of a man consecutive to volition, it is farther inquired, whether he be at liberty to *will* or no? And to this it has been answered, That in most cases a man is not at liberty to forbear the act of volition; he must exert an act of his *will*, whereby the action proposed is made to exist, or not to exist. But yet there is a case wherein a man is at liberty in respect of *willing*, and that is the choosing of a remote good as an end to be pursued. Here a man may suspend the act of his choice from being determined for or against the thing proposed, till he has examined whether it be really of a nature in itself, and consequences to make him happy or no. For when he has once chosen it, and thereby it is become a part of his happiness, it raises desire, and that proportionably gives him uneasiness, which determines his *will*, and sets him at work in pursuit of his choice on all occasions that offer. And here we may see how it comes to pass, that a man may justly incur punishment, though it be certain that in all the particular actions that he *wills*, he does, and necessarily does will that which he then judges to be good. For though his *will* be always determined by that which is judged good by his understanding, yet it excuses him not: because by a too hasty choice of his own making, he has imposed on himself wrong measures of good and evil; which, however false and fallacious, have the same influence on all his future conduct, as if they were true and right. He has vitiated his own palate, and must be answerable to himself for the sickness and death that follows from it. The eternal law and nature of things must not be altered, to comply with his ill-ordered choice. If the neglect or abuse of the liberty he had to examine what would really and truly make for his happiness, misleads him, the miscarriages that follow on it must be imputed to his own election. He had a power to suspend his determination: it was given

him, that he might examine and take care of his own happiness, and look that he were not deceived. And he could never judge, that it was better to be deceived than not, in a matter of so great and near concernment.

What has been said, may also discover to us the reason why men in this world prefer different things; and pursue happiness by contrary courses. But yet since men are always constant and in earnest, in matters of happiness and misery, the question still remains, *How men come often to prefer the worse to the better*; and to choose that, which, by their own confession, has made them miserable.

§ 57.

To account for the various and contrary ways men take, though all aim at being happy, we must consider whence the various *uneasinesses*, that determine the will in the preference of each voluntary action, have their rise.

I. *From bodily Pain.*

Some of them come from causes not in our power, such as are often the pains of the body from want, disease, or outward injuries, as the rack, &c. which when present and violent, operate for the most part forcibly on the *will*, and turn the courses of men's lives from virtue, piety, and religion, and what before they judged to lead to happiness; every one not endeavouring, or through disuse not being able, by the contemplation of remote and future good, to raise in himself desires of them strong enough to counterbalance the uneasiness he feels in those bodily torments, and to keep his *will* steady in the choice of those actions which lead to future happiness. A neighbour country has been of late a tragical theatre, from which we might fetch instances, if there needed any, and the world did not in all countries and ages furnish examples enough to confirm that received observation, *Necessitas cogit ad Turpia*; and therefore there is great reason for us to pray, *Lead us not into temptation.*

2. *From wrong Desires arising from wrong Judgment.*

Other *uneasinesses* arise from our desires of absent good; which desires always bear proportion to, and depend on, the judgment we make, and the relish we have of any absent good: in both which we are apt to be variously misled, and that by our own fault.

§ 58. *Our Judgment of present Good or Evil always right.*

IN the *first* place, I shall consider the wrong judgments men make of future good and evil, whereby their desires are misled. For as to present happiness and misery, when that alone comes in consideration, and the consequences are quite removed, *a man never chooses amiss*; he knows what best pleases him, and that he actually prefers. Things in their present enjoyment are what they seem; the apparent and real good are, in this case, always the same. For the pain or pleasure being just so great, and no greater than it is felt, the present good or evil is really so much as it appears. And therefore were every action of ours concluded within itself, and drew no consequences after it, we should undoubtedly never err in our choice of good; we should always infallibly prefer the best. Were the pains of honest industry, and of starving with hunger and cold, set together before us, nobody would be in doubt which to choose: Were the satisfaction of a lust, and the joys of heaven, offered at once to any one's present possession, he would not balance, or err in the determination of his choice.

§ 59.

BUT since our voluntary actions carry not all the happiness and misery that depend on them, along with them in their present performance, but are the precedent causes of good and evil, which they draw after them, and bring upon us, when they themselves are passed and cease to be; our desires look beyond our present enjoyments, and carry the mind out to absent good, according to the necessity which we think there is of it, to the making or increase of our happiness. It is our opinion of such a necessity that gives it its attrac-

tion : without that, we are not moved by absent good. For in this narrow scantling of capacity, which we are accustomed to, and sensible of here, wherein we enjoy but one pleasure at once, which, when all uneasiness is away, is, whilst it lasts, sufficient to make us think ourselves happy ; it is not all remote, and even apparent good, that affects us. Because the indolency and enjoyment we have sufficing for our present happiness, we desire not to venture the change ; since we judge that we are happy already, being content, and that is enough. For who is content is happy. But as soon as any new uneasiness comes, this happiness is disturbed, and we are set afresh on work in the pursuit of happiness.

§ 60. *From a wrong Judgment of what makes a necessary Part of their Happiness.*

THEIR aptness, therefore, to conclude that they can be happy without it, is one great occasion that men often are not raised to the desire of the greatest absent good. For whilst such thoughts possess them, the joys of a future state move them not ; they have little concern or uneasiness about them ; and the will, free from the determination of such desires, is left to the pursuit of nearer satisfactions, and to the removal of those uneasinesses which it then feels, in its want of, and longings after, them. Change but a man's view of these things ; let him see that virtue and religion are necessary to his happiness ; let him look into the future state of bliss or misery, and see there God, the righteous Judge, ready to render to every man according to his deeds ; to them who, by patient continuance in well-doing, seek for glory, and honour, and immortality, eternal life ; but unto every soul that doth evil, indignation and wrath, tribulation and anguish : To him, I say, who hath a prospect of the different state of perfect happiness or misery, that attends all men after this life, depending on their behaviour here, the measures of good and evil, that govern his choice, are mightily changed. For since nothing of pleasure and pain in this life can bear any proportion to endless happiness, or exquisite misery of an immortal

soul hereafter ; actions in his power will have their preference, not according to the transient pleasure or pain that accompanies or follows them here, but as they serve to secure that perfect durable happiness hereafter.

§ 61. *A more particular Account of wrong Judgments.* BUT to account more particularly for the misery that men often bring on themselves, notwithstanding that they do all in earnest pursue happiness, we must consider how *things* come to be *represented* to our desires, *under deceitful appearances* : And that is by the judgment pronouncing wrongly concerning them. To see how far this reaches, and what are the causes of wrong judgment, we must remember that things are judged good or bad in a double sense.

First, That which is properly good or bad, is nothing but barely pleasure or pain.

Secondly, But because not only present pleasure and pain, but that also which is apt by its efficacy or consequences to bring it upon us at a distance, is a proper object of our desires, and apt to move a creature that has foresight ; therefore *things* also *that draw after them pleasure and pain, are considered as good and evil.*

§ 62.

THE *wrong judgment* that *misleads* us, and makes the will often fasten on the worse side, lies in misreporting upon the various comparisons of these. The *wrong judgment* I am here speaking of, is not what one man may think of the determination of another, but what every man himself must confess to be wrong. For since I lay it for a certain ground, that every intelligent being really seeks happiness, which consists in the enjoyment of pleasure, without any considerable mixture of uneasiness ; it is impossible any one should willingly put into his own draught any bitter ingredient, or leave out any thing in his power, that would tend to his satisfaction, and the completing of his happiness, but only by *wrong judgment*. I shall not here speak of that mistake which is the consequence of invincible error, which scarce deserves the name of *wrong judgment* ; but

of that *wrong judgment* which every man himself must confess to be so.

§ 63. *In comparing present and future*

I. THEREFORE as to present pleasure and pain, the mind, as has been said, never mistakes that which is really good or evil; that which is the greater pleasure, or the greater pain, is really just as it appears. But though present pleasure and pain show their difference and degrees so plainly, as not to leave room for mistake; yet *when we compare present pleasure or pain with future* (which is usually the case in the most important determinations of the will), *we often make wrong judgments* of them, taking our measures of them in different positions of distance. Objects, near our view, are apt to be thought greater than those of a larger size, that are more remote: and so it is with pleasures and pains; the present is apt to carry it, and those at a distance have the disadvantage in the comparison. Thus most men, like spendthrift heirs, are apt to judge a little in hand better than a great deal to come; and so for small matters in possession, part with great ones in reversion. But that this is a *wrong judgment*, every one must allow, let his pleasure consist in whatever it will: since that which is future, will certainly come to be present; and then having the same advantage of nearness, will show itself in its full dimensions, and discover his wilful mistake, who judged of it by unequal measures. Were the pleasure of drinking accompanied, the very moment a man takes off his glass, with that sick stomach and aching head, which in some men are sure to follow not many hours after; I think nobody, whatever pleasure he had in his cups, would, on these conditions, ever let wine touch his lips; which yet he daily swallows, and the evil side comes to be chosen only by the fallacy of a little difference in time. But if pleasure or pain can be so lessened only by a few hours removal, how much more will it be so by a farther distance, to a man that will not by a right judgment do what time will, *i. e.* bring it home upon himself, and consider it as present, and there take its true dimensions? This is the way we

usually impose on ourselves, in respect of bare pleasure and pain; or the true degrees of happiness or misery: The future loses its just proportion, and what is present obtains the preference as the greater. I mention not here the *wrong judgment*, whereby the absent are not only lessened, but reduced to perfect nothing; when men enjoy what they can in present, and make sure of that, concluding amiss that no evil will thence follow. For that lies not in comparing the greatness of future good and evil, which is that we are here speaking of; but in another sort of *wrong judgment*, which is concerning good or evil, as it is considered to be the cause and procurement of pleasure or pain, that will follow from it.

§ 64. *Causes of this.*

THE cause of our judging amiss, when we compare our present pleasure or pain with future, seems to me to be *the weak and narrow constitution of our minds*. We cannot well enjoy two pleasures at once, much less any pleasure almost, whilst pain possesses us. The present pleasure, if it be not very languid, and almost none at all, fills our narrow souls, and so takes up the whole mind, that it scarce leaves any thought of things absent: or if among our pleasures, there are some which are not strong enough to exclude the consideration of things at a distance; yet we have so great an abhorrence of pain, that a little of it extinguishes all our pleasures: a little bitter mingled in our cup leaves no relish of the sweet. Hence it comes, that at any rate we desire to be rid of the present evil, which we are apt to think nothing absent can equal; because under the present pain we find not ourselves capable of any the least degree of happiness. Men's daily complaints are a loud proof of this: The pain that any one actually feels is still of all others the worst; and it is with anguish they cry out, *Any rather than this; nothing can be so intolerable as what I now suffer*. And therefore our whole endeavours and thoughts are intent to get rid of the present evil, before all things, as the first necessary condition to our happiness, let what will follow. Nothing,

as we passionately think, can exceed, or almost equal, the uneasiness that sits so heavy upon us. And because the abstinence from a present pleasure that offers itself, is a pain; nay oftentimes a very great one, the desire being inflamed by a near and tempting object; it is no wonder that that operates after the same manner pain does, and lessens in our thoughts what is future; and so forces us, as it were, blindfold into its embraces.

§ 65.

ADD to this, that absent good, or which is the same thing, future pleasure, especially if of a sort we are unacquainted with, seldom is able to counterbalance any uneasiness, either of pain or desire, which is present. For its greatness being no more than what shall be really tasted when enjoyed, men are apt enough to lessen that, to make it give place to any present desire; and conclude with themselves, that when it comes to trial, it may possibly not answer the report or opinion that generally passes of it; they having often found, that not only what others have magnified, but even what they themselves have enjoyed with great pleasure and delight at one time, has proved insipid or nauseous at another; and therefore they see nothing in it for which they should forego a present enjoyment. But that this is a *false way of judging*, when applied to the happiness of another life, they must confess; unless they will say, God cannot make those happy he designs to be so. For that being intended for a state of happiness, it must certainly be agreeable to every one's wish and desire: Could we suppose their relishes as different there as they are here, yet the manna in heaven will suit every one's palate. Thus much of the *wrong judgment* we make of present and future pleasure and pain, when they are compared together, and so the absent considered as future.

§ 66. *In considering consequences of Actions.*

II. *As to things good or bad in their consequences*, and by the aptness in them to procure us good or evil in the future, *we judge amiss several ways.*

1. When we *judge* that so much evil does not really depend on them, as in truth there does.

2. When we *judge*, that though the consequence be of that moment, yet it is not of that certainty, but that it may otherwise fall out, or else by some means be avoided, as by industry, address, change, repentance, &c. That these are *wrong* ways of *judging*, were easy to show in every particular, if I would examine them at large singly : But I shall only mention this in general, viz. that it is a very wrong and irrational way of proceeding, to venture a greater good for a less, upon uncertain guesses, and before a due examination be made proportionable to the weightiness of the matter, and the concernment it is to us not to mistake. This, I think, every one must confess, especially if he considers the usual *causes* of this *wrong judgment*, whereof these following are some.

§ 67. *Causes of this.*

I. *IGNORANCE* : He that judges without informing himself to the utmost that he is capable, cannot acquit himself of *judging amiss*.

II. *Inadvertency* : When a man overlooks even that which he does know. This is an affected and present ignorance, which misleads our judgments as much as the other. Judging is, as it were, balancing an account, and determining on which side the odds lie. If therefore either side be huddled up in haste, and several of the sums, that should have gone into the reckoning, be overlooked and left out, this precipitancy causes as *wrong a judgment*, as if it were a perfect ignorance. That which most commonly causes this, is the prevalency of some present pleasure or pain, heightened by our feeble passionate nature, most strongly wrought on by what is present. To check this precipitancy, our understanding and reason was given us, if we will make a right use of it, to search and see, and then judge thereupon. Without liberty, the understanding would be to no purpose : And without understanding, liberty (if it could be) would signify nothing. If a man sees what would do him good or harm, what would

make him happy or miserable, without being able to move himself one step towards or from it, what is he the better for seeing? And he that is at liberty to ramble in perfect darkness, what is his liberty better, than if he were driven up and down as a bubble by the force of the wind? The being acted by a blind impulse from without or from within, is little odds. The first therefore, and great use of liberty, is to hinder blind precipitancy; the principal exercise of freedom is to stand still, open the eyes, look about, and take a view of the consequence of what we are going to do, as much as the weight of the matter requires. How much sloth and negligence, heat and passion, the prevalency of fashion, or acquired indispositions, do severally contribute on occasion to these *wrong judgments*, I shall not here farther inquire. I shall only add one other false judgment, which I think necessary to mention, because perhaps it is little taken notice of, though of great influence.

§ 68. *Wrong Judgment of what is necessary to our Happiness.*

ALL men desire happiness, that is past doubt; but, as has been already observed, when they are rid of pain, they are apt to take up with any pleasure at hand, or that custom has endeared to them, to rest satisfied in that; and so being happy, till some new desire, by making them uneasy, disturbs that happiness, and shows them that they are not so, they look no farther; nor is the will determined to any action, in pursuit of any other known or apparent good. For since we find that we cannot enjoy all sorts of good, but one excludes another; we do not fix our desires on every apparent greater good, unless it be judged to be necessary to our happiness; if we think we can be happy without it, it moves us not. This is another occasion to men of *judging wrong*, when they take not that to be necessary to their happiness, which really is so. This mistake misleads us both in the choice of the good we aim at, and very often in the means to it, when it is a remote good. But which way ever it be, either by placing it

where really it is not, or by neglecting the means as not necessary to it; when a man misses his great end, happiness, he will acknowledge he judged not right. That which contributes to this mistake, is the real or supposed unpleasantness of the actions, which are the way to this end; it seeming so preposterous a thing to men, to make themselves unhappy in order to happiness, that they do not easily bring themselves to it.

§ 69. *We can change the Agreeableness or Disagreeableness in Things.*

THE last inquiry, therefore, concerning this matter is, Whether it be in a man's power to change the pleasantness and unpleasantness that accompanies any sort of action? and to that it is plain in many cases he can. Men may and should correct their palates, and give a relish to what either has, or they suppose has none. The relish of the mind is as various as that of the body, and like that too may be altered: and it is a mistake to think, that men cannot change the displeasingness or indifferency that is in actions into pleasure and desire, if they will do but what is in their power. A due consideration will do it in some cases; and practice, application and custom in most. Bread or tobacco may be neglected, where they are shown to be useful to health, because of an indifferency or disrelish to them; reason and consideration at first recommends, and begins their trial, and use finds, or custom makes, them pleasant. That this is so in virtue too, is very certain. Actions are pleasing or displeasing, either in themselves, or considered as a means to a greater and more desirable end. The eating of a well-seasoned dish, suited to a man's palate, may move the mind by the delight itself that accompanies the eating, without reference to any other end: To which the consideration of the pleasure there is in health and strength (to which that meat is subservient), may add a new gusto, able to make us swallow an ill-relished potion. In the latter of these, any action is rendered more or less pleasing, only by the contemplation of the end, and the being more or less persuaded of its tendency to it,

or necessary connection with it : But the pleasure of the action itself is best acquired or increased by use and practice. Trials often reconcile us to that, which at a distance we looked on with aversion ; and by repetitions wear us into a liking of what possibly, in the first essay, displeased us. Habits have powerful charms, and put so strong attractions of easiness and pleasure into what we accustom ourselves to, that we cannot forbear to do, or at least be easy in the omission of actions, which habitual practice has suited, and thereby recommends to us. Though this be very visible, and every one's experience shows him he can do ; yet it is a part in the conduct of men towards their happiness, neglected to a degree, that it will be possibly entertained as a paradox, if it be said that men can make things or actions more or less pleasing to themselves ; and thereby remedy that, to which one may justly impute a great deal of their wandering. Fashion and the common opinion having settled wrong notions, and education and custom ill habits, the just values of things are misplaced, and the palates of men corrupted. Pains should be taken to rectify these ; and contrary habits change our pleasures, and give a relish to that which is necessary or conducive to our happiness. This every one must confess he can do, and when happiness is lost, and misery overtakes him, he will confess he did amiss in neglecting it, and condemn himself for it : And I ask every one, Whether he has not often done so ?

§ 70. *Preference of Vice to Virtue, a manifest wrong Judgment.*

I SHALL not now enlarge any farther on the *wrong judgments*, and neglect of what is in their power, whereby men mislead themselves. This would make a volume, and is not my business. But whatever false notions, and shameful neglect of what is in their power, may put men out of their way to happiness, and distract them, as we see, into so different courses of life, this yet is certain, that morality, established upon its true foundations, cannot but determine the choice in any one

that will but consider : And he that will not be so far a rational creature as to reflect seriously upon infinite happiness and misery, must needs condemn himself, as not making that use of his understanding he should. The rewards and punishments of another life, which the Almighty has established as the enforcements of his law, are of weight enough to determine the choice, against whatever pleasure or pain this life can show, when the eternal state is considered but in its bare possibility, which nobody can make any doubt of. He that will allow exquisite and endless happiness to be but the possible consequence of a good life here, and the contrary state the possible reward of a bad one, must own himself to judge very much amiss, if he does not conclude, that a virtuous life, with the certain expectation of everlasting bliss which may come, is to be preferred to a vicious one, with the fear of that dreadful state of misery, which it is very possible may overtake the guilty ; or, at best, the terrible uncertain hope of annihilation. This is evidently so, though the virtuous life here had nothing but pain, and the vicious continual pleasure ; which yet is, for the most part, quite otherwise, and wicked men have not much the odds to brag of, even in their present possession : nay, all things rightly considered, have, I think, even the worst part here. But when infinite happiness is put in one scale, against infinite misery in the other ; if the worst that comes to the pious man, if he mistakes, be the best that the wicked can attain to, if he be in the right, who can, without madness, run the venture ? Who in his wits would choose to come within a possibility of infinite misery, which if he miss, there is yet nothing to be got by that hazard ? Whereas, on the other side, the sober man ventures nothing against infinite happiness to be got, if his expectation comes to pass. If the good man be in the right, he is eternally happy ; if he mistakes, he is not miserable, he feels nothing. On the other side, if the wicked be in the right, he is not happy ; if he mistakes, he is infinitely

miserable. Must it not be a most manifest wrong judgment, that does not presently see to which side, in this case, the preference is to be given? I have forbore to mention any thing of the certainty or probability of a future state, designing here to show the *wrong judgment* that any one must allow he makes upon his own principles, laid how he pleases, who prefers the short pleasures of a vicious life upon any consideration, whilst he knows, and cannot but be certain, that a future life is at least possible.

§ 71. *Recapitulation.*

To conclude this inquiry into human liberty, which as it stood before, I myself from the beginning fearing, and a very judicious friend of mine, since the publication, suspecting to have some mistake in it, though he could not particularly show it me, I was put upon a stricter review of this chapter. Wherein lighting upon a very easy and scarce observable slip I have made, in putting one seemingly indifferent word for another, that discovery opened to me this present view, which here, in this *second* edition, I submit to the learned world, and which in short is this: *Liberty* is a power to act or not to act, according as the mind directs. A power to direct the operative faculties to motion or rest, in particular instances, is that which we call the *will*. That which, in the train of our voluntary actions, determines the *will* to any change of operation, is some present uneasiness; which is, or at least is always accompanied with, that of *desire*. Desire is always moved by evil, to fly it; because a total freedom from pain always makes a necessary part of our happiness: But every good, nay every *greater good*, does not constantly move *desire*; because it may not make, or may not be taken to make, any necessary part of our happiness. For all that we desire, is only to be happy. But though this general *desire* of happiness operates constantly and invariably, yet the satisfaction of any particular *desire* can be suspended from determining the *will* to any subservient action, till we have maturely examined, whether the particular apparent good, which we then desire, makes

a part of our real happiness, or be consistent or inconsistent with it. The result of our judgment upon that examination is what ultimately determines the man, who could not be *free* if his *will* were determined by any thing but his own *desire*, guided by his own *judgment*. I know that liberty by some is placed in an *indifferency* of the man, antecedent to the determination of his *will*. I wish they who lay so much stress on such an *antecedent indifferency*, as they call it, had told us plainly, whether this supposed *indifferency* be antecedent to the thought and judgment of the understanding, as well as to the decree of the *will*. For it is pretty hard to state it between them; *i. e.* immediately after the judgment of the understanding, and before the determination of the *will*; because the determination of the *will* immediately follows the judgment of the understanding: and to place liberty in an *indifferency*, antecedent to the thought and judgment of the understanding, seems to me to place liberty in a state of darkness, wherein we can neither see nor say any thing of it; at least it places it in a subject incapable of it, no agent being allowed capable of liberty, but in consequence of thought and judgment. I am not nice about phrases, and therefore consent to say with those that love to speak so, that liberty is placed in *indifferency*; but it is an *indifferency* which remains after the judgment of the understanding; yea, even after the determination of the *will*: And that is an *indifferency*, not of the man (for after he has once judged which is best, *viz.* to do, or forbear, he is no longer indifferent), but an *indifferency* of the operative powers of the man, which remaining equally able to operate, or to forbear operating after, as before the decree of the *will*, are in a state, which, if one pleases, may be called *indifferency*; and as far as this *indifferency* reaches, a man is free, and no farther: *v. g.* I have the ability to move my hand, or to let it rest, that operative power is indifferent to move, or not to move my hand: I am then in that respect perfectly free. My *will* determines that operative power to rest, I am yet free, because the *indifferency* of that my operative power to act,

or not to act, still remains ; the power of moving my hand is not at all impaired by the determination of my *will*, which at present orders rest ; the *indifferency* of that power to act, or not to act, is just as it was before, as will appear, if the *will* puts it to the trial, by ordering the contrary. But if, during the rest of my hand, it be seized by a sudden palsy, the *indifferency* of that operative power is gone, and with it my liberty ; I have no longer freedom in that respect, but am under a necessity of letting my hand rest. On the other side, if my hand be put into motion by a convulsion, the *indifferency* of that operative faculty is taken away by that motion, and my liberty in that case is lost : For I am under a necessity of having my hand move. I have added this, to show in what sort of *indifferency* liberty seems to me to consist, and not in any other, real or imaginary.

§ 72.

TRUE notions concerning the nature and extent of *liberty*, are of so great importance, that I hope I shall be pardoned this digression, which my attempt to explain it has led me into. The *ideas* of *will*, *volition*, *liberty*, and *necessity*, in this chapter of power, came naturally in my way. In a former edition of this treatise, I gave an account of my thoughts concerning them, according to the light I then had : And now, as a lover of truth, and not a worshipper of my own doctrines, I own some change of my opinion, which I think I have discovered ground for. In what I first writ, I, with an unbiassed indifference, followed truth, whither I thought she led me. But neither being so vain as to fancy infallibility, nor so disingenuous as to dissemble my mistakes, for fear of blemishing my reputation, I have, with the same sincere design, for truth only, not been ashamed to publish what a severer inquiry has suggested. It is not impossible but that some may think my former notions right, and some (as I have already found) these latter, and some neither. I shall not at all wonder at this variety in men's opinions ; impartial deductions of reason in controverted points being so ve-

ry rare, and exact ones in abstract notions not so very easy, especially if of any length. And therefore I should think myself not a little beholden to any one, who would, upon these or any other grounds, fairly clear this subject of *liberty* from any difficulties that may yet remain.

Before I close this chapter, it may, perhaps, be to our purpose, and help to give us clearer conceptions about power, if we make our thoughts take a little more exact survey of action. I have said above, that we have *ideas* but of two sorts of action, viz. *motion* and *thinking*. These, in truth, though called and counted actions, yet, if nearly considered, will not be found to be always perfectly so. For, if I mistake not, there are instances of both kinds, which, upon due consideration, will be found rather passions than actions, and consequently so far the effects barely of passive powers in those subjects, which yet on their account are thought agents. For in these instances, the substance that hath motion, or thought, receives the impression, whereby it is put into that action, purely from without, and so acts merely by the capacity it has to receive such an impression from some external agent; and such a power is not properly an active power, but a mere passive capacity in the subject. Sometimes the substance, or agent, puts itself into action by its own power, and this is properly active power. Whatsoever modification a substance has, whereby it produces any effect, that is called action; v. g. a solid substance by motion operates on, or alters the sensible *ideas* of another substance, and therefore this modification of motion we call action. But yet this motion, in that solid substance, is, when rightly considered, but a passion, if it received it only from some external agent. So that the active power of motion is in no substance which cannot begin motion in itself, or in another substance, when at rest. So likewise in thinking, a power to receive *ideas* or *thoughts* from the operation of any external substance, is called a power of thinking: but this is but a passive power, or capacity. But to be able to

bring into view *ideas* out of sight, at one's own choice, and to compare which of them one thinks fit, this is an active power. This reflection may be of some use to preserve us from mistakes about powers and actions, which grammar, and the common frame of languages, may be apt to lead us into: since what is signified by verbs that grammarians call active, does not always signify action; *v. g.* this proposition, I see the moon, or a star, or I feel the heat of the sun, though expressed by a verb active, does not signify any action in me, whereby I operate on those substances; but the reception of the *ideas* of light, roundness, and heat, wherein I am not active, but barely passive, and cannot in that position of my eyes, or body, avoid receiving them. But when I turn my eyes another way, or remove my body out of the sunbeams, I am properly active; because of my own choice, by a power within myself, I put myself into that motion. Such an action is the product of active power.

§ 73. *Recapitulation.*

AND thus I have, in a short draught, given a view of our original *ideas*, from whence all the rest are derived, and of which they are made up; which if I would consider as a philosopher, and examine on what causes they depend, and of what they are made, I believe they all might be reduced to these very few primary and original ones, *viz. extension, solidity, mobility*, or the power of being moved; which, by our senses, we receive from body: *perceptivity*, or the power of perception, or thinking; *motivity*, or the power of moving; which, by reflection, we receive from our minds. I crave leave to make use of these two new words, to avoid the danger of being mistaken in the use of those which are equivocal. To which if we add *existence, duration, number*, which belong both to the one and the other, we have, perhaps, all the original *ideas*, on which the rest depend. For by these, I imagine, might be explained the nature of colours, sounds, tastes, smells, and all other *ideas* we have, if we had but faculties acute enough to perceive the severally modified exten-

sions and motions of these minute bodies, which produce those several sensations in us. But my present purpose being only to inquire into the knowledge the mind has of things, by those *ideas* and appearances, which God has fitted it to receive from them, and how the mind comes by that knowledge, rather than into their causes, or manner of production, I shall not, contrary to the design of this essay, set myself to inquire philosophically into the peculiar constitution of bodies, and the configuration of parts, whereby they have the power to produce in us the *ideas* of their sensible qualities: I shall not enter any farther into that disquisition; it sufficing to my purpose to observe, that gold or saffron has a power to produce in us the *idea* of yellow; and snow or milk, the *idea* of white; which we can only have by our sight, without examining the texture of the parts of those bodies, or the particular figures, or motion of the particles, which rebound from them, to cause in us that particular sensation: though when we go beyond the bare *ideas* in our minds, and would inquire into their causes, we cannot conceive any thing else to be in any sensible object, whereby it produces different *ideas* in us, but the different bulk, figure, number, texture, and motion of its insensible parts.

END OF VOLUME FIRST.

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